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## **COLLECTED DATABASE OF NON-SATURATION PORCINE DIVES (Air and Mixed-Gas)**

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13. ABSTRACT (Maximum 200 words) Animal models of decompression sickness (DCS) have been developed in various species. The Naval Medical Research Institute (NMRI) developed a porcine model of DCS through the course of more than 300 dives, encompassing widely diverse dive profiles on air and mixed-gas. Some of these profiles include decompression stops, some do not; some profiles include post-dive treatments, and others do not. This report provides the collected database of non-saturation porcine dives undertaken to develop the NMRI porcine DCS model. It correlates the dive profiles with summaries of the various observed outcome measures.			
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## TABLE OF CONTENTS

Acknowledgments.....	ii
Introduction.....	1
Methods.....	1
Discussion.....	2
References.....	5

### List of Tables

Table 1. Data Summary by Dive Type: Non-Neurological Manifestations .....	3
Table 2. Data Summary by Dive Type: Neurological Manifestations.....	4

### List of Appendices

Appendix 1. Dive and Animal Characteristics	
Appendix 2. Manifestations (by category)	
Appendix 3. Comments on Manifestations	
Appendix 4. Graphic and Real-Time Descriptions of the Dive Programs	

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We would like to thank Dr. Jonathan Broome who initiated the swine model work at NMRI. Much of the data presented here are the result of his efforts. We also want to recognize the consistent efforts of the dedicated laboratory personnel who contributed throughout the 3-year data accumulation period: Ms. Catherine Jones, Mr. Melvin Routh, and Petty Officers Harold Boyles and Norm Wilt. Finally, we thank Ms. Susan Mannix for editorial support and assistance.

## **INTRODUCTION**

The Naval Medical Research Institute (NMRI) developed a porcine model of decompression sickness (DCS) as a tool for the prospective study of factors that may influence the risk of DCS in an animal (1-3). The porcine model has been established as a successful animal model for research in several human pathologies (4-7). This model has also proved to be highly flexible and has been applied to multiple areas of investigation including practical, clinical, and basic science issues (8-11). These areas include the identification of physical, physiological, and environmental risk factors, the comparison and assessment of treatment strategies; and the research into histopathological, cellular, microvascular, and even genetic determinants of susceptibility to DCS (12-14). We recently adapted the porcine model to explore saturation profiles and evaluate therapeutic intervention stratagems.

The pooled data included here represent the current generation of the NMRI porcine model from its initiation in 1994 through the last non-saturation dive in 1996. We compiled details from these dives into a central, accessible format for rapid, retrospective study of DCS in this species. The database includes the significant animal characteristics, individual dive profiles, physiologic measurements, and observed clinical outcome for each of the animal dives. This effort parallels a similar compilation of human data at NMRI for mathematical modeling efforts to predict DCS outcomes. Eventually, we plan to use these databases in interspecies scaling efforts (15).

## **METHODS**

Data were collected and recorded for each study while the dive was performed, and were maintained in both handwritten form and on computer spreadsheet files. Throughout the three

years of data collection, many different formats for data recording were used in the computerized database. All of the data were reviewed and compiled into a single uniform format using Borland® QUATTRO PRO spreadsheet software. The new format was developed to assign observational fields for all pertinent outcome measures and subject characteristics. All fields and database entry cells have been annotated with data directly from the handwritten forms, from previously generated computer-based entries, or recorded/listed as not observed, when appropriate. All files were reviewed specifically to prevent duplication and scrutinized for entry errors.

## **DISCUSSION**

The information collected, recorded, and maintained varies with each study; therefore, the database provides limited descriptive information. Tables 1 and 2 summarize the manifestations by dive type. The ultimate value of an animal model is determined by its applicability to predicting human outcome. This determination can only be achieved through a clear understanding of the dose-response for DCS, the application of appropriate mathematical models of expected outcomes, and ultimately by developing a scaleable relationship between the compared species. This corpus of information serves as an archived starting point for such efforts.

**Table 1. DATA SUMMARY BY DIVE TYPE: NON-NEUROLOGICAL MANIFESTATIONS**

Dive Type	# Dives	Depth (feet)	Bottom Time (min)	Skin Bends			Skin Bend Latency (min)	Malaise			Anorexia			Weakness		
				Yes	No	Unk		Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
1	5	200	23.43	5	0		7.04	3	0	2		0	5			5
4	17	200	23.36	15	2		10.04	2	7	8		9	8			17
5	20	200	23.52	14	6		13.44	2	12	6	1	9	10			20
6	19	250	8.5	18	1		7.74	3	5	11	5	5	9			19
8	21	250	8.5	15	6		6.08	4	6	11	2	8	11			21
9	14	200	17	11	3		17.54	8	3	3		9	5			14
10	16	200	17	10	5	1	25.16	6	7	3		11	5			16
11	11	200	17	10	1		28.57	5	6		1	10		1		10
12	10	200	17	8	2		21.94		10			10				10
13	10	200	17	8	2		41.75	4	6		3	7				10
14	10	200	17	8	2		13.74	5	5		5	4	1			10
15A	81	250	30	27	54		3.45	13	62	6	10	65	6	10	67	4
15AS	13	250	30	2	11		4.00	2	11		2	11		2	11	0
15B	49	250	30	13	36		7.11	10	38	1	13	35	1	7	41	1
15P	4	250	30	3	1		3.67	1	3		1	3		2	1	1
16	65	250	30	20	44	1	11.67	10	53	2	10	53	2	8	53	4

**Table 2. DATA SUMMARY BY DIVE TYPE: NEUROLOGICAL MANIFESTATIONS**

Dive Type	# Dives	Depth (feet)	Bottom Time (min)	Neuro Hit			Neuro Hit Latency (min)	Spinal Cord Hemorrhage		
				Yes	No	Unk		Lesions	No Lesions	Unk
1	5	200	23.43	4	1		21.38		2	3
4	17	200	23.36	9	8		6.20	10	7	
5	20	200	23.52	6	14		22.06	3	17	
6	19	250	8.5	15	4		7.22	3	5	11
8	21	250	8.5	10	11		5.66	2	8	11
9	14	200	17	8	6		14.32		8	6
10	16	200	17	8	8		3.63		11	5
11	11	200	17	5	6		29.44		2	9
12	10	200	17	1	9		6.00		1	9
13	10	200	17	6	4		27.20		1	9
14	10	200	17	4	6		23.75		2	8
15A	81	250	30	43	37	1	19.98		2	79
15AS	13	250	30	5	8		14.90			13
15B	49	250	30	26	22	1	32.63		2	47
15P	4	250	30	2	2		67.50			4
16	65	250	30	28	36	1	24.97			65



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# APPENDIX 1: DIVE AND ANIMAL CHARACTERISTICS

DIVE DATE	PIG #	DIVE PROGRAM	AGE (days)	WT. (KG)	DEPTH (FT)	BOTTOM TIME (minutes)
28-Jun-94	40	1		18.90	200	23.43
16-Aug-94	341	1		19.20	200	23.43
05-Dec-94	850	4	62	18.40	200	23.36
05-Dec-94	953	4	61	20.20	200	23.36
05-Dec-94	851	4	61	19.80	200	23.36
09-Dec-94	874	4	67	20.60	200	23.36
14-Dec-94	899	4	68	18.70	200	23.36
14-Dec-94	900	4	68	19.60	200	23.36
15-Dec-94	896	4	65	18.30	200	23.36
04-Jan-95	944	5	67	20.00	200	23.52
04-Jan-95	946	5	67	19.30	200	23.52
05-Jan-95	947	5	68	20.60	200	23.52
05-Jan-95	945	5	68	18.30	200	23.52
06-Jan-95	949	5	69	19.60	200	23.52
06-Jan-95	948	5	69	20.30	200	23.52
10-Jan-95	978	5	70	19.00	200	23.52
10-Jan-95	979	5	70	18.00	200	23.52
12-Jan-95	981	5	72	19.30	200	23.52
12-Jan-95	980	5	72	19.60	200	23.52
13-Jan-95	983	4	67	18.00	200	23.36
13-Jan-95	982	5	67	20.00	200	23.52
18-Jan-95	503	4	70	20.10	200	23.36
18-Jan-95	505	5	70	18.80	200	23.52
19-Jan-95	506	4	71	21.10	200	23.36
19-Jan-95	507	5	71	20.80	200	23.52
20-Jan-95	502	4	72	22.10	200	23.36
20-Jan-95	504	5	72	21.10	200	23.52
24-Jan-95	533	4	68	18.90	200	23.36
24-Jan-95	536	5	69	20.20	200	23.52
25-Jan-95	534	4	68	20.00	200	23.36
25-Jan-95	532	5	69	19.30	200	23.52
26-Jan-95	535	4	69	18.30	200	23.36
26-Jan-95	537	5	71	18.50	200	23.52
31-Jan-95	260	4	68	19.70	200	23.36
31-Jan-95	262	5	69	19.90	200	23.52
01-Feb-95	261	4	68	18.60	200	23.36
01-Feb-95	257	5	69	19.30	200	23.52
02-Feb-95	259	4	70	18.40	200	23.36
02-Feb-95	258	5	70	18.50	200	23.52
11-Apr-95	734	6	69	20.35	250	8.50
11-Apr-95	735	6	69	20.30	250	8.50
11-Apr-95	738	8	69	21.30	250	8.50
12-Apr-95	733	8	68	20.50	250	8.50
13-Apr-95	736	6	70	20.20	250	8.50
13-Apr-95	737	8	69	19.60	250	8.50
18-Apr-95	923	6	62	20.65	250	8.50
18-Apr-95	927	8	62	19.15	250	8.50
19-Apr-95	926	6	63	19.90	250	8.50
19-Apr-95	929	8	61	17.90	250	8.50
20-Apr-95	928	6	62	19.10	250	8.50
20-Apr-95	925	8	64	19.20	250	8.50

25-Apr-95	420	6	63	20.50	250	8.50
25-Apr-95	421	8	63	20.60	250	8.50
26-Apr-95	417	6		22.80	250	8.50
26-Apr-95	418	8	64	19.50	250	8.50
03-May-95	821	6	62	20.80	250	8.50
03-May-95	823	8	62	19.60	250	8.50
04-May-95	822	6	63	22.40	250	8.50
04-May-95	824	8	63	22.20	250	8.50
10-May-95	11	6	64	20.50	250	8.50
10-May-95	7	8	64	19.80	250	8.50
11-May-95	8	6	65	20.40	250	8.50
11-May-95	12	8	65	21.90	250	8.50
16-May-95	28	6	61	21.20	250	8.50
16-May-95	33	8	61	20.20	250	8.50
17-May-95	29	6	63	20.70	250	8.50
17-May-95	30	8	63	20.70	250	8.50
18-May-95	31	6	64	21.05	250	8.50
18-May-95	32	8	64	20.65	250	8.50
23-May-95	39	6	68	21.40	250	8.50
23-May-95	38	8	68	18.60	250	8.50
24-May-95	35	6	70	21.60	250	8.50
24-May-95	34	8	70	21.10	250	8.50
26-May-95	37	6	71	21.20	250	8.50
26-May-95	36	8	71	18.60	250	8.50
31-May-95	42	6		20.40	250	8.50
31-May-95	41	8		20.20	250	8.50
02-Jun-95	40	1		19.40	200	23.43
28-Jun-95	381	1		21.30	200	23.43
28-Jun-95	384	1		20.50	200	23.43
01-Aug-95	341	8		21.50	250	8.50
01-Aug-95	342	8		20.90	250	8.50
08-Aug-95	361	10		22.90	200	17.00
09-Aug-95	363	9		21.30	200	17.00
09-Aug-95	362	10		21.70	200	17.00
10-Aug-95	364	9		19.20	200	17.00
10-Aug-95	365	10		20.30	200	17.00
10-Aug-95	360	10		19.50	200	17.00
17-Aug-95	379	9		17.50	200	17.00
17-Aug-95	378	10		19.30	200	17.00
22-Aug-95	376	9		19.60	200	17.00
22-Aug-95	374	10		20.00	200	17.00
23-Aug-95	377	9		20.40	200	17.00
23-Aug-95	375	10		18.00	200	17.00
24-Aug-95	393	9		17.00	200	17.00
24-Aug-95	394	10		17.90	200	17.00
29-Aug-95	201	9		19.50	200	17.00
29-Aug-95	400	10		22.50	200	17.00
30-Aug-95	397	9		19.60	200	17.00
30-Aug-95	396	10		22.10	200	17.00
31-Aug-95	398	9		20.00	200	17.00
31-Aug-95	399	10		21.00	200	17.00
06-Sep-95	207	9		18.20	200	17.00
06-Sep-95	209	10		18.10	200	17.00
07-Sep-95	210	9		21.80	200	17.00
07-Sep-95	208	10		20.10	200	17.00
19-Sep-95	248	9		18.50	200	17.00

19-Sep-95	249	10		18.00	200	17.00
20-Sep-95	247	9		20.10	200	17.00
20-Sep-95	246	10		17.50	200	17.00
21-Sep-95	250	9		20.40	200	17.00
26-Sep-95	251	10		18.65	200	17.00
03-Oct-95	60	11	72	20.50	200	17.00
03-Oct-95	61	12	72	18.95	200	17.00
04-Oct-95	63	11	74	19.45	200	17.00
04-Oct-95	62	12	71	19.60	200	17.00
05-Oct-95	58	11	77	18.95	200	17.00
05-Oct-95	59	12	77	16.80	200	17.00
11-Oct-95	294	11	68	19.60	200	17.00
11-Oct-95	295	12	68	19.85	200	17.00
12-Oct-95	293	11	68	20.40	200	17.00
12-Oct-95	296	12	68	17.80	200	17.00
07-Nov-95	139	11	64	19.30	200	17.00
07-Nov-95	144	12	66	19.80	200	17.00
08-Nov-95	141	11	64	18.00	200	17.00
08-Nov-95	143	12	66	18.00	200	17.00
09-Nov-95	140	11	64	18.10	200	17.00
09-Nov-95	142	12	64	17.65	200	17.00
14-Nov-95	164	11	69	20.30	200	17.00
14-Nov-95	166	12	69	20.60	200	17.00
16-Nov-95	163	11	68	19.45	200	17.00
16-Nov-95	168	12	69	20.05	200	17.00
17-Nov-95	167	13		17.25	200	17.00
17-Nov-95	165	14		18.35	200	17.00
30-Nov-95	190	13	62	18.60	200	17.00
30-Nov-95	193	14	62	20.80	200	17.00
01-Dec-95	191	13	62	19.50	200	17.00
01-Dec-95	194	14	62	19.00	200	17.00
05-Dec-95	24	13	66	17.70	200	17.00
05-Dec-95	26	14	65	18.70	200	17.00
06-Dec-95	29	13	64	17.95	200	17.00
06-Dec-95	25	14	66	19.00	200	17.00
07-Dec-95	27	13	65	18.65	200	17.00
07-Dec-95	28	14	64	18.60	200	17.00
12-Dec-95	37	13	61	21.25	200	17.00
12-Dec-95	38	14	61	21.40	200	17.00
13-Dec-95	35	13	61	19.85	200	17.00
13-Dec-95	36	14	61	20.65	200	17.00
14-Dec-95	40	13	61	14.20	200	17.25
14-Dec-95	39	14	61	17.50	200	17.00
17-Jan-96	74	13	61	21.80	200	17.00
17-Jan-96	73	14	61	18.80	200	17.00
18-Jan-96	71	15P	63	21.50	250	30.00
18-Jan-96	72	15P	63	24.50	250	30.00
23-Jan-96	76	15P	65	20.80	250	30.00
23-Jan-96	75	15P	65	23.10	250	30.00
24-Jan-96	401	15A	63	18.60	250	30.00
30-Jan-96	402	15A	63	20.60	250	30.00
30-Jan-96	404	15A	62	19.40	250	30.00
31-Jan-96	420	15A	61	18.60	250	30.00
31-Jan-96	422	15A	61	18.40	250	30.00
01-Feb-96	403	15A	73	18.30	250	30.00
01-Feb-96	421	15A	61	17.20	250	30.00

06-Feb-96	433	15A	65	18.90	250	30.00
06-Feb-96	435	15A	65	21.20	250	30.00
07-Feb-96	430	15A	66	19.10	250	30.00
07-Feb-96	437	15A	66	18.60	250	30.00
08-Feb-96	432	15A	67	18.10	250	30.00
08-Feb-96	431	15AS	67	17.60	250	30.00
13-Feb-96	87	15A		20.30	250	30.00
13-Feb-96	86	15AS	64	18.60	250	30.00
14-Feb-96	84	15A	65	19.40	250	30.00
14-Feb-96	88	15AS	65	21.70	250	30.00
15-Feb-96	85	15A	66	19.50	250	30.00
15-Feb-96	83	15AS	66	18.50	250	30.00
21-Feb-96	453	15A	65	18.95	250	30.00
21-Feb-96	454	15AS	65	19.35	250	30.00
22-Feb-96	455	15A	66	19.75	250	30.00
22-Feb-96	452	15AS	66	19.35	250	30.00
23-Feb-96	457	15A	67	19.20	250	30.00
23-Feb-96	456	15AS	67	19.70	250	30.00
27-Feb-96	482	15A	64	19.80	250	30.00
27-Feb-96	480	15AS	64	18.50	250	30.00
28-Feb-96	483	15A	65	18.00	250	30.00
28-Feb-96	481	15AS	65	19.85	250	30.00
29-Feb-96	484	15A	66	17.50	250	30.00
29-Feb-96	479	15AS	66	18.20	250	30.00
05-Mar-96	499	15A		20.60	250	30.00
05-Mar-96	497	15AS	64	20.00	250	30.00
06-Mar-96	495	16	65	18.80	250	30.00
06-Mar-96	498	15A	65	21.10	250	30.00
07-Mar-96	494	16	66	20.30	250	30.00
07-Mar-96	496	15A	66	18.80	250	30.00
12-Mar-96	529	16	87	19.50	250	30.00
12-Mar-96	527	15A	87	19.50	250	30.00
13-Mar-96	531	16	89	20.05	250	30.00
13-Mar-96	526	16	88	19.50	250	30.00
14-Mar-96	530	16	89	17.70	250	30.00
14-Mar-96	528	15A	88	18.30	250	30.00
19-Mar-96	90	16	63	20.00	250	30.00
19-Mar-96	94	15A	63	19.60	250	30.00
20-Mar-96	93	16	64	20.50	250	30.00
20-Mar-96	91	15A	64	19.20	250	30.00
21-Mar-96	92	16	65	17.80	250	30.00
21-Mar-96	89	15A	65	18.40	250	30.00
26-Mar-96	544	16	62	20.70	250	30.00
26-Mar-96	547	15A	62	20.10	250	30.00
27-Mar-96	545	16	63	21.10	250	30.00
27-Mar-96	546	15A	63	19.00	250	30.00
28-Mar-96	548	16	64		250	30.00
28-Mar-96	543	15A	64	17.50	250	30.00
09-Apr-96	593	16	62	22.30	250	30.00
09-Apr-96	592	15A	62	23.50	250	30.00
10-Apr-96	594	16	64	20.50	250	30.00
10-Apr-96	590	15A	64	21.00	250	30.00
11-Apr-96	589	16	65	18.00	250	30.00
11-Apr-96	591	15A	65	20.60	250	30.00
18-Apr-96	7	16	64	21.50	250	30.00
18-Apr-96	1	15A	64	21.90	250	30.00

19-Apr-96	5	15A	65	20.60	250	30.00
19-Apr-96	2	15AS	65	21.60	250	30.00
23-Apr-96	3	15A	70	20.40	250	30.00
23-Apr-96	4	15AS	70	19.20	250	30.00
24-Apr-96	719	15A	62	18.90	250	30.00
24-Apr-96	722	15B	62	16.90	250	30.00
25-Apr-96	720	15A	63	18.80	250	30.00
25-Apr-96	721	15B	63	18.80	250	30.00
07-May-96	750	15B	72	22.00	250	30.00
07-May-96	752	15A	72	20.10	250	30.00
08-May-96	751	15A	73	18.50	250	30.00
08-May-96	747	15B	73	18.80	250	30.00
09-May-96	749	15A	74	18.20	250	30.00
09-May-96	748	15B	74	19.50	250	30.00
14-May-96	771	15A	68	22.40	250	30.00
14-May-96	772	15B	68	19.50	250	30.00
15-May-96	775	15A	69	19.30	250	30.00
15-May-96	773	15B	69	19.70	250	30.00
16-May-96	776	15A	70	17.00	250	30.00
16-May-96	774	15B	70	19.70	250	30.00
21-May-96	786	15A	71	20.40	250	30.00
22-May-96	784	15B	72	19.10	250	30.00
23-May-96	785	15A	73	19.90	250	30.00
23-May-96	788	15B	73	19.70	250	30.00
28-May-96	787	15A	78	19.80	250	30.00
29-May-96	789	11	79	20.20	200	17.00
30-May-96	796	N/A	68	19.40		
04-Jun-96	797	15A	72	23.10	250	30.00
04-Jun-96	795	15B	72	22.10	250	30.00
05-Jun-96	794	15A	83	22.70	250	30.00
05-Jun-96	798	15B	73	20.10	250	30.00
11-Jun-96	663	15A	66	22.00	250	30.00
11-Jun-96	659	15B	66	20.50	250	30.00
13-Jun-96	662	15A	68	19.40	250	30.00
13-Jun-96	661	15B	68	19.40	250	30.00
18-Jun-96	658	15A	74	19.10	250	30.00
18-Jun-96	660	15B	74	18.20	250	30.00
19-Jun-96	812	15A	64	18.80	250	30.00
19-Jun-96	808	15B	64	19.00	250	30.00
20-Jun-96	811	15A	65	18.25	250	30.00
20-Jun-96	807	15B	65	18.50	250	30.00
25-Jun-96	809	15A	75	18.40	250	30.00
25-Jun-96	810	15B	75	22.70	250	30.00
26-Jun-96	204	15A	72	20.80	250	30.00
26-Jun-96	203	15B	72	18.9	250	30.00
27-Jun-96	201	15A	73	17.80	250	30.00
27-Jun-96	202	15B	73	18.70	250	30.00
09-Jul-96	905	16	73	21.50	250	30.00
09-Jul-96	907	15A	73	19.00	250	30.00
10-Jul-96	906	16	74	21.60	250	30.00
10-Jul-96	908	15A	74	20.50	250	30.00
11-Jul-96	909	16	75	17.40	250	30.00
11-Jul-96	910	15A	75	19.40	250	30.00
18-Jul-96	911	16	55	18.00	250	30.00
18-Jul-96	916	15A	57	18.20	250	30.00
19-Jul-96	914	16	58	19.50	250	30.00

19-Jul-96	912	15A	58	19.10	250	30.00
23-Jul-96	913	16	62	18.50	250	30.00
23-Jul-96	915	15A	62	17.90	250	30.00
24-Jul-96	922	16	60	18.70	250	30.00
24-Jul-96	918	15A	60	18.50	250	30.00
25-Jul-96	917	16	61	20.00	250	30.00
25-Jul-96	920	15A	61	21.00	250	30.00
30-Jul-96	921	16	66	19.40	250	30.00
30-Jul-96	919	15A	66	16.60	250	30.00
31-Jul-96	877	15A	71	19.4	250	30.00
31-Jul-96	879	16	71	19.3	250	30.00
01-Aug-96	878	16	72	18.9	250	30.00
01-Aug-96	876	15A	72	16.90	250	30.00
06-Aug-96	894	16	68	20	250	30.00
06-Aug-96	892	15A	68	20.6	250	30.00
07-Aug-96	893	16	69	20	250	30.00
07-Aug-96	891	15A	69	20.3	250	30.00
08-Aug-96	890	15A	70	17.9	250	30.00
08-Aug-96	895	15A	70	18.0	250	30.00
13-Aug-96	928	16	66	18.80	250	30.00
13-Aug-96	924	15A	66	20.00	250	30.00
14-Aug-96	925	16	67	17.90	250	30.00
14-Aug-96	926	15A	67	17.80	250	30.00
15-Aug-96	927	16	68	21.30	250	30.00
15-Aug-96	929	15A	68	21.00	250	30.00
04-Sep-96	40	16	64	21.20	250	30.00
04-Sep-96	42	15A		20.40	250	30.00
05-Sep-96	37	16	65	18.70	250	30.00
05-Sep-96	39	15A	65	19.00	250	30.00
06-Sep-96	38	16	66	19.20	250	30.00
06-Sep-96	41	15A	66	18.90	250	30.00
10-Sep-96	46	15A			250	30.00
10-Sep-96	45	16			250	30.00
11-Sep-96	47	16		19.5	250	30.00
11-Sep-96	43	15B		19.4	250	30.00
12-Sep-96	48	16		17.8	250	30.00
12-Sep-96	44	15B		21.2	250	30.00
17-Sep-96	54	16		21.3	250	30.00
17-Sep-96	55	15B		21.5	250	30.00
18-Sep-96	53	16		20.2	250	30.00
18-Sep-96	56	15B		20.6	250	30.00
19-Sep-96	57	16		21.3	250	30.00
19-Sep-96	52	15B		19.9	250	30.00
24-Sep-96	64	16		20.3	250	30.00
24-Sep-96	67	15B		20.1	250	30.00
25-Sep-96	63	16		19.4	250	30.00
25-Sep-96	66	15B		20.8	250	30.00
26-Sep-96	65	16		17.6	250	30.00
26-Sep-96	62	15B		16.3	250	30.00
01-Oct-96	75	16		21.90	250	30.00
01-Oct-96	74	15B		18.00	250	30.00
02-Oct-96	71	16		21.30	250	30.00
02-Oct-96	72	15B		18.4	250	30.00
03-Oct-96	73	16		20.9	250	30.00
03-Oct-96	70	15B		18.3	250	30.00
09-Oct-96	92	16		17.8	250	30.00



09-Oct-96	90	15B		19.3	250	30.00
10-Oct-96	94	16		16.7	250	30.00
10-Oct-96	93	15B		20.4	250	30.00
16-Oct-96	97	16		21.5	250	30.00
16-Oct-96	95	15B		20.2	250	30.00
17-Oct-96	98	16		19.3	250	30.00
17-Oct-96	96	15B		18.7	250	30.00
22-Oct-96	606	16		18.9	250	30.00
22-Oct-96	607	15B		21.3	250	30.00
23-Oct-96	605	16		19.3	250	30.00
23-Oct-96	604	15B		19.4	250	30.00
06-Nov-96	630	16		16.8	250	30.00
06-Nov-96	632	15B		21.6	250	30.00
07-Nov-96	629	16		20.6	250	30.00
07-Nov-96	627	15B		19.1	250	30.00
13-Nov-96	640	16		21.8	250	30.00
13-Nov-96	641	15B		21.8	250	30.00
14-Nov-96	642	16		18	250	30.00
14-Nov-96	643	15B		22.4	250	30.00
19-Nov-96	649	16		20.6	250	30.00
19-Nov-96	648	15B		24.7	250	30.00
20-Nov-96	651	16		20.4	250	30.00
20-Nov-96	652	15B		19.6	250	30.00
21-Nov-96	650	16		19.7	250	30.00
21-Nov-96	647	15B		19.7	250	30.00
26-Nov-96	658	16		21.4	250	30.00
26-Nov-96	657	15B		20.2	250	30.00
27-Nov-96	660	16		16.9	250	30.00
27-Nov-96	661	15B		17.9	250	30.00
04-Dec-96	673	16		20	250	30.00
04-Dec-96	672	15B		19.8	250	30.00
05-Dec-96	670	16		19.2	250	30.00
05-Dec-96	669	15B		20.3	250	30.00
06-Dec-96	671	16		17.6	250	30.00
06-Dec-96	674	15B		19	250	30.00



# APPENDIX 2: MANIFESTATIONS

DIVE DATE	PIG #	NEURO HIT (Y/N)	TIME NEURO SX (minutes)	NEURO SEVERITY	SKIN BENDS (Y/N)	SKIN AREA	TIME SKIN (minutes)	WEAKNESS (Y/N)	MALaise (Y/N)	ANOREXIA (Y/N)	SPINAL CORD HEMORRHAGE (Y=lesions)
28-Jun-94	40	N			Y	MILD	9.00		Y		N
16-Aug-94	341	Y	10.50	SEV	Y	MILD	7.00		Y		
05-Dec-94	850	N			Y	MIN					N
05-Dec-94	953	N			Y	MOD					N
05-Dec-94	851	Y	7.33	SEV	Y	MOD					Y
09-Dec-94	874	Y		SEV	Y	SEV					Y
14-Dec-94	899	Y	3.50	SEV	Y	MOD	13.00				Y
14-Dec-94	900	N			Y	MIN	11.00		N	N	Y
15-Dec-94	896	N			Y	MIN					N
04-Jan-95	944	N			N	0			N		N
04-Jan-95	946	Y	51.00		Y	MILD	13.00		Y		N
05-Jan-95	947	Y	60.00		Y	MOD	12.00		Y		N
05-Jan-95	945	N			Y	MIN	21.00		N	N	Y
06-Jan-95	949	N			N	0			N	N	N
06-Jan-95	948	N			Y	MIN	25.00		N	Y	N
10-Jan-95	978	N			Y	MIN					N
10-Jan-95	979	Y	8.36	MILD	Y	MOD			Y		N
12-Jan-95	981	N			Y	MIN					N
12-Jan-95	980	N			Y	MIN					N
13-Jan-95	983	Y	3.00	SEV	Y	MOD	5.00		Y		N
13-Jan-95	982	N			Y	MOD	15.00		N		N
18-Jan-95	503	Y	3.50	SEV	Y	SEV	8.50		N	N	Y
18-Jan-95	505	N			N	0					N
19-Jan-95	506	N			N	0					N
19-Jan-95	507	Y	10.00	MOD	Y	SEV					Y
20-Jan-95	502	Y	12.30	SEV	Y	MOD	9.00		N	N	Y
20-Jan-95	504	N			Y	MIN	0.00		N	N	N
24-Jan-95	533	Y	13.00	MILD	Y	MOD	7.43		N	N	Y
24-Jan-95	536	Y	1.00	SEV	Y	SEV	5.00		N	N	N
25-Jan-95	534	N			N	0				N	N
25-Jan-95	532	Y	2.00	LAME	Y	MOD	10.00		N	N	N
26-Jan-95	535	Y	2.00	SEV	Y	SEV	4.00		N	N	Y
26-Jan-95	537	N			N	0			N	N	N
31-Jan-95	260	N			Y	MOD	17.00		N	N	N
31-Jan-95	262	N			N	0			N	N	Y
01-Feb-95	261	N			Y	MIN	18.50		N	N	Y

01-Feb-95	257	N				Y	MIN		20.00		N	N	N	N
02-Feb-95	259	Y	5.00	SEV		Y	SEV		7.00		Y	N	N	Y
02-Feb-95	258	N				N	0				N	N	N	N
11-Apr-95	734	Y	4.37	SEV		Y			5.00					
11-Apr-95	735	N				Y	MED		5.00		N	N	N	
11-Apr-95	738	N				Y	MIN		3.30		N	N	N	
12-Apr-95	733	Y	10.00	MOD/SEV		N	0							
13-Apr-95	736	Y	60.00			Y	MED		6.00		N	N	N	
13-Apr-95	737	N				Y	MIN		7.50		N	N	N	
18-Apr-95	923	Y	3.07	SEVERE		Y	SEV							
18-Apr-95	927	N				N	0				N	N	N	N
19-Apr-95	926	N				Y	SEV		7.00		N	N	N	N
19-Apr-95	929	N				N	0				N	N	N	N
20-Apr-95	928	Y	11.00	SEV		Y	MOD		6.00		N	N	N	N
20-Apr-95	925	Y	4.43	MILD		Y	MIN							
25-Apr-95	420	Y	1.43	SEV		Y	MIN		22.00		N	N	N	
25-Apr-95	421	N				Y	MIN		4.00		N	N	N	
26-Apr-95	417	N				Y	SEV							
26-Apr-95	418	Y	1.43	SEV		Y	MIN		5.00		N	N	N	
03-May-95	821	Y	1.17	MOD		Y	MOD		8.50					
03-May-95	823	Y	13.00	MOD		Y	MED		5.50			Y		
04-May-95	822	Y	4.00	SEV		Y	MOD		5.00					
04-May-95	824	N				N								
10-May-95	11	Y	2.00	SEV		Y	SEV		4.00			Y		
10-May-95	7	Y	2.00	SEV		Y	SEV		4.00					N
11-May-95	8	N				Y	MIN		10.00			Y		
11-May-95	12	N				Y	MOD		4.50		Y			N
16-May-95	28	Y	2.00			Y	MIN		8.42			Y		Y
16-May-95	33	N				N	0							
17-May-95	29	Y	2.50	SEV		Y	MIN		4.50					N
17-May-95	30	Y	1.25	SEV		Y	SEV		3.25					Y
18-May-95	31	Y	2.20			Y	MED		11.00					
18-May-95	32	N				Y	MIN							
23-May-95	39	Y	1.67	SEV		Y	MED		7.00		Y			N
23-May-95	38	Y	1.50			Y	MIN		9.00		Y	Y		N
24-May-95	35	Y		SEV (DIED)		Y	SEV		8.00		Y	Y		Y
24-May-95	34	N				N	0							Y
26-May-95	37	Y	1.50	SEV		N	0				Y	Y		N
26-May-95	36	N				Y	MIN		12.00					N
31-May-95	42	Y	4.20	SEV		Y	MOD		6.37					Y
31-May-95	41	Y	6.00	MOD/WEAK		Y	MIN		4.00					

02-Jun-95	40	Y	60.00	MILD	Y	MILD	5.18		Y			N
28-Jun-95	381	Y	5.00	SEV	Y	MILD	8.00					
28-Jun-95	384	Y	10.00	SEV	Y	MILD	6.00					
01-Aug-95	341	Y	2.00	SEV	Y	SEV	2.00		Y		N	N
01-Aug-95	342	Y	15.00	MILD	Y	MILD	15.00		Y		N	N
08-Aug-95	361	Y	1.30	MOD	Y	30	30.00		Y		N	N
09-Aug-95	363	Y	7.83	MOD	Y	MOD	8.50		Y		N	N
09-Aug-95	362	Y	1.50	SEV	N	0			Y		N	N
10-Aug-95	364	N			N	0			N		N	N
10-Aug-95	365	Y	3.00	MOD	N	0			Y		N	N
10-Aug-95	360	N			N	0			N		N	N
17-Aug-95	379	N			Y		30.00					
17-Aug-95	378	N										
22-Aug-95	376	Y	8.50	MILD	Y	20	11.40		Y		N	N
22-Aug-95	374	N			Y	6	22.00		N		N	N
23-Aug-95	377	Y	60.00	MILD	Y	112	20.00		Y		N	N
23-Aug-95	375	Y	17.00	MILD	Y	SEV	10.00		Y		N	N
24-Aug-95	393	Y	23.00	MILD	Y	204	5.00		Y			
24-Aug-95	394	N			Y	120	7.58		N			
29-Aug-95	201	Y	1.50	MILD	Y		12.00					
29-Aug-95	400	N			Y	MIN	28.00		N			
30-Aug-95	397	N			Y	MIN	16.00					
30-Aug-95	396	Y	1.00	MILD	Y	2	24.00					
31-Aug-95	398	N			Y	133	16.00		Y			
31-Aug-95	399	Y	1.67	MOD	N	0						
06-Sep-95	207	Y	8.75	MILD	Y	60	25.00		Y		N	N
06-Sep-95	209	N			Y	66	23.00		N		N	N
07-Sep-95	210	Y	3.00	SEV	Y	815	14.00		Y		N	N
07-Sep-95	208	Y	1.75	MILD	Y	42	40.00		N		N	N
19-Sep-95	248	N			N	0			N		N	N
19-Sep-95	249	Y	1.83	MILD	Y	435	7.00		Y		N	N
20-Sep-95	247	N			N	0			N		N	N
20-Sep-95	246	N			Y	15	60.00		Y		N	N
21-Sep-95	250	Y	2.00	MOD	Y	24	35.00		Y		N	N
26-Sep-95	251	N			N	0			N		N	N
03-Oct-95	60	N			Y	37	24.00		Y		N	N
03-Oct-95	61	N			N	0			N		N	N
04-Oct-95	63	Y	60.00	MILD	Y	131	8.50		N		N	N
04-Oct-95	62	N			Y	30	15.00		N		N	N
05-Oct-95	58	N			Y	1028	6.00		N		N	N
05-Oct-95	59	N			Y	146	14.00		N		N	N

11-Oct-95	294	N						96	74.00		Y	N	N	N
11-Oct-95	295	N						12	83.00		N	N	N	N
12-Oct-95	293	Y	1.20	SEV				534	30.00		Y	Y	Y	N
12-Oct-95	296	N						16	30.00		N	N	N	
07-Nov-95	139	N						0			Y	N	N	
07-Nov-95	144	N						324	6.00		N	N	N	
08-Nov-95	141	N						104	39.17		Y	N	N	
08-Nov-95	143	N						537	5.50		N	N	N	
09-Nov-95	140	Y	60.00	MILD/MOD				113	16.00		N	N	N	
09-Nov-95	142	N						42	16.00		N	N	N	
14-Nov-95	164	N						21	60.00		N	N	N	
14-Nov-95	166	N						0			N	N	N	
16-Nov-95	163	Y	24.00	MOD				165	8.00		N	N	N	
16-Nov-95	168	Y	6.00	SEV				1000+	6.00		N	N	N	
17-Nov-95	167	Y	60.00	MOD				34	60.00		Y	N	N	
17-Nov-95	165	Y	60.00	MOD				386	6.88		N			
30-Nov-95	190	Y	2.00	MILD				28	60.00		N	N	N	
30-Nov-95	193	Y	3.00	MOD				400	18.00		Y	Y	Y	N
01-Dec-95	191	N						4	90.00		N	N	N	N
01-Dec-95	194	N						128	28.00		Y	Y	Y	N
05-Dec-95	24	Y	9.00	MILD				0			N	N	N	
05-Dec-95	26	N						0			N	N	N	
06-Dec-95	29	N						108	22.00		N	N	N	
06-Dec-95	25	N						445	7.00		N	N	N	
07-Dec-95	27	N						130	53.00		N	N	N	
07-Dec-95	28	Y	19.00					24	10.00		Y	Y	Y	
12-Dec-95	37	Y	5.00					1080	7.00		Y	Y	Y	
12-Dec-95	38	Y	13.00	MILD				340	13.00		Y	Y	Y	
13-Dec-95	35	N						40	36.00		N	N	N	
13-Dec-95	36	N						2000	5.00		N	N	N	
14-Dec-95	40	Y						0			Y	Y	Y	
14-Dec-95	39	N						130	22.00		N	N	N	
17-Jan-96	74	Y	60.00	MOD				52	6.00		Y	Y	Y	
17-Jan-96	73	N						0			Y	Y	Y	
18-Jan-96	71	Y						0		N	Y	Y	Y	
18-Jan-96	72	Y	60.00	MOD				32	7.00	Y	N	N	N	
23-Jan-96	76	N						84	2.00		N	N	N	
23-Jan-96	75	Y	75.00	MOD				1260	2.00	Y	N	N	N	
24-Jan-96	401	N						50	2.00		N	N	N	
30-Jan-96	402	Y	1.40	SEV				0			Y	Y	Y	
30-Jan-96	404	Y	10.00	MILD				0		N	Y	Y	Y	



19-Mar-96	94	Y	60.00	MOD/SEV	N	0		Y	N	N
20-Mar-96	93	N			N	0		N	N	N
20-Mar-96	91	N			N	0		N	N	N
21-Mar-96	92	Y	30.00	MILD	N	0		N	N	N
21-Mar-96	89	Y	60.00	MILD/MOD	Y	6	4.00	N	N	N
26-Mar-96	544	Y	1.00	SEV	Y	870		N	N	N
26-Mar-96	547	N			N	0		N	Y	Y
27-Mar-96	545	N			N	0		N	N	N
27-Mar-96	546	N			Y	452	2.00	N	N	N
28-Mar-96	548	sacrific								
28-Mar-96	543	Y	11.00	SEV	Y	30	1.00	Y	N	N
09-Apr-96	593	N			N	0		N	N	N
09-Apr-96	592	N			N	0		N	N	N
10-Apr-96	594	Y	2.00	SEV	N	0		Y	N	N
10-Apr-96	590	Y	1.00	SEV	Y	54	4.97		N	N
11-Apr-96	589	N			N			N	N	N
11-Apr-96	591	Y	3.17		Y	84	1.00	Y	Y	Y
18-Apr-96	7	N			Y	180	2.00	N	N	N
18-Apr-96	1	N			N	0		N	N	N
19-Apr-96	5	N			N	0		Y	N	N
19-Apr-96	2	N			N	0		N	N	N
23-Apr-96	3	Y	26.00	MOD	Y	35	1.00	N	N	N
23-Apr-96	4	N			N	0		N	N	N
24-Apr-96	719	N			Y	187	10.00	N	N	
24-Apr-96	722	N			Y	24	20.00	N	N	N
25-Apr-96	720	Y	68.00	MILD	Y	4	3.73	N	N	N
25-Apr-96	721	Y	1.00	MOD/SEV	N	0		N	N	N
07-May-96	750	Y	62.00	MOD	Y	10	7.00	N	N	N
07-May-96	752	Y	5.00	SEV	Y	64	2.00	Y	N	N
08-May-96	751	Y	70.00	VERY MILD	N			N	N	N
08-May-96	747	N			N	0		N	N	N
09-May-96	749	N			N	0		N	N	N
09-May-96	748	Y	60.00	MILD/MOD	N	0		N	N	N
14-May-96	771	Y	60.00	MILD	N	0		N	N	N
14-May-96	772	N			N	0		N	N	N
15-May-96	775	Y	60.00	MILD	N	0		N	N	N
15-May-96	773	Y	60.00	MOD	Y	9	6.00	N	N	N
16-May-96	776	Y	60.00	MOD	N	0		N	N	N
16-May-96	774	Y	60.00	MILD	N	0		N	N	N
21-May-96	786	Y	expired		Y					
22-May-96	784	Y	60.00	MILD	N	0		N	N	N



23-May-96	785	Y	30.00	SEV	Y	16		2.00	Y	N	N	N
23-May-96	788	Y	60.00	MILD	N	0			N	N	N	N
28-May-96	787	Y	10.00	SEV	Y	330		1.00	Y	N	N	N
29-May-96	789	Y	2.00	SEV	Y	400		20.00	Y	N	N	N
30-May-96	796											
04-Jun-96	797	N			Y	30		5.00	N			
04-Jun-96	795	Y	71.00	SEV	N	0			Y	Y	Y	Y
05-Jun-96	794	Y	60.00	SEV	N	0			N	Y	Y	Y
05-Jun-96	798	Y	60.00	MOD	N	0			N	Y	N	N
11-Jun-96	663	Y	10.00	MOD/SEV	N	0			N	Y	Y	Y
11-Jun-96	659	N			N	0			N	N	N	N
13-Jun-96	662	Y	2.00	MILD	Y	20		14.00	N	N	N	N
13-Jun-96	661	N			N	0			N	N	N	N
18-Jun-96	658	Y	2.00	MILD	Y	8		5.00	N	N	N	N
18-Jun-96	660	N			N	0			N	N	N	N
19-Jun-96	812	N			N	0			N	N	N	N
19-Jun-96	808	N			N	0			N	Y	Y	Y
20-Jun-96	811	N			N	0			N	Y	Y	Y
20-Jun-96	807	Y		MILD	N	0			N			
25-Jun-96	809	N			N	0			N	N	N	N
25-Jun-96	810	N			N	0			N	N	N	N
26-Jun-96	204	N			Y	750		5.00	N	N	N	N
26-Jun-96	203	N			N	0			N	Y	Y	Y
27-Jun-96	201	N			N	0			N	N	N	N
27-Jun-96	202	N			N	0			N	N	N	N
09-Jul-96	905	N			N	0			N	N	N	N
09-Jul-96	907	Y	5		N	0			N	Y	Y	Y
10-Jul-96	906	Y	1.00	SEV	N	0			Y	N	N	N
10-Jul-96	908	N			N	0			N	N	N	N
11-Jul-96	909	N			Y	49		8.00	N	N	N	N
11-Jul-96	910	N			N	0			N	N	N	N
18-Jul-96	911	Y	63.00		Y	456		1.00	N	N	N	N
18-Jul-96	916	N			N	0			N	N	N	N
19-Jul-96	914	N			N	0			N	N	N	N
19-Jul-96	912	N			N	0			N	N	N	N
23-Jul-96	913	N			N	0			N	N	N	N
23-Jul-96	915	N			N	0			N	N	N	N
24-Jul-96	922	N			N	0			N	N	N	N
24-Jul-96	918	Y			N	0			N	N	N	N
25-Jul-96	917	N			N	0			N	N	N	N
25-Jul-96	920	N			N	0			N	N	N	N

30-Jul-96	921	N							0		N		N		N		N
30-Jul-96	919	N							0		N		N		N		N
31-Jul-96	877	Y		15					0		N		N		N		N
31-Jul-96	879	Y		1.60					0		N		N		N		N
01-Aug-96	878	N							120	4	Y		Y		Y		Y
01-Aug-96	876	N							0		N		N		N		N
06-Aug-96	894	N							0		N		N		N		N
06-Aug-96	892	Y		5.00	MILD				25	10	Y		Y		Y		Y
07-Aug-96	893	Y		2.00					12	2	Y		N		N		Y
07-Aug-96	891	Y							0		N		N		N		N
08-Aug-96	890	Y		2	MILD				0		N		N		Y		Y
08-Aug-96	895	Y		6.00					0		N		N		Y		N
13-Aug-96	928	Y		30.00	MOD						N		N		Y		Y
13-Aug-96	924	N									N		N		N		N
14-Aug-96	925	N							0		N		N		N		N
14-Aug-96	926	N							0		N		N		N		N
15-Aug-96	927	N							0		N		N		N		N
15-Aug-96	929	Y							0		N		N		N		N
04-Sep-96	40	Y		60.00	MILD				0		N		Y		Y		Y
04-Sep-96	42	Y		2.00	SEV						N		Y				
05-Sep-96	37	Y							0		N		N		Y		Y
05-Sep-96	39	Y									Y		N		N		N
06-Sep-96	38	N							0		N		N		N		N
06-Sep-96	41	N							102	2.00	Y		N		N		N
10-Sep-96	46										N		N		N		N
10-Sep-96	45	Y									Y		N				
11-Sep-96	47	Y		60	MILD						N		Y		N		Y
11-Sep-96	43	N									N		N		N		Y
12-Sep-96	48	N							63	5	Y		N		N		N
12-Sep-96	44	Y		60	MILD						N		N		Y		Y
17-Sep-96	54	N									N		N		N		N
17-Sep-96	55	Y		1.95	MOD						N		N		Y		N
18-Sep-96	53	N							12	12	Y		N		N		N
18-Sep-96	56	N									N		N		N		N
19-Sep-96	57	Y		60	MILD				9	10	Y		N		N		N
19-Sep-96	52	Y		60	MILD						N		N		N		Y
24-Sep-96	64	Y		60	MILD						N		N		N		N
24-Sep-96	67	Y		2	MOD				16	15	Y		N		N		N
25-Sep-96	63	N									N		N		N		N
25-Sep-96	66	N								20	Y		N		N		N
26-Sep-96	65	N									N		N		N		N

26-Sep-96	62	N				Y			1.49	N	N	N
01-Oct-96	75	N				N				N	Y	N
01-Oct-96	74	N				N				N		N
02-Oct-96	71	N				N				N		N
02-Oct-96	72	Y	60	MILD		N				N	Y	N
03-Oct-96	73	Y	1.87	MILD		N				N	Y	Y
03-Oct-96	70	N				N				N		N
09-Oct-96	92	N				Y	289		5	N	N	N
09-Oct-96	90	Y	1.25	MOD		N				N	Y	Y
10-Oct-96	94	Y	1.45	MOD		N				N	N	N
10-Oct-96	93	N				N				N		Y
16-Oct-96	97	N				N				N		N
16-Oct-96	95	Y	2	MOD		N				Y	Y	Y
17-Oct-96	98	Y	60	MILD		N				N	Y	N
17-Oct-96	96	Y	2	MOD		N				N		Y
22-Oct-96	606	N				N				N		N
22-Oct-96	607	N				Y	9		2	N		N
23-Oct-96	605	Y	2	MOD		Y	4		10	N		N
23-Oct-96	604	Y	2.5	MOD		N				N		Y
06-Nov-96	630	N				Y	77		10	N		N
06-Nov-96	632	Y	1.95	MOD		Y	TOTAL BODY		1.95	Y	Y	Y
07-Nov-96	629	N				N				N		N
07-Nov-96	627	Y	2	MOD		N				N		N
13-Nov-96	640	Y	10	MOD		Y	110		20	N		N
13-Nov-96	641	N				N				N		N
14-Nov-96	642	N				Y	9		15	N		N
14-Nov-96	643	N				Y	12		3	N		N
19-Nov-96	649	Y	1.5	MOD		Y	450		10	N	Y	Y
19-Nov-96	648	Y	60	MILD		Y	25		6	Y	N	N
20-Nov-96	651	Y	2	SEV		Y			2	Y	N	Y
20-Nov-96	652	Y	2	SEV		Y			2	Y	N	N
21-Nov-96	650	N				Y	126		10	N		N
21-Nov-96	647	Y	2	SEV		Y	217		2	Y	N	N
26-Nov-96	658	Y	2	MOD		Y	84		60	N	N	N
26-Nov-96	657	Y				N					N	N
27-Nov-96	660	N				N				N	N	N
27-Nov-96	661	N				N				N	N	N
04-Dec-96	673	Y	60	MILD		N				Y	N	N
04-Dec-96	672	N				N				N		N
05-Dec-96	670	N				N				N		N
05-Dec-96	669	Y	2	MOD		Y			6	Y	N	Y

06-Dec-96	671	Y	60	MILD	Y	32	30	Y	N	N	
06-Dec-96	674	Y	60	MILD	N			N	N	N	

### APPENDIX 3: COMMENTS

DIVE DATE	PIG #	DESCRIPTION
28-Jun-94	40	
16-Aug-94	341	
05-Dec-94	850	
05-Dec-94	953	
05-Dec-94	851	BILATERAL HIND LEG INVOLVEMENT
09-Dec-94	874	AT SURFACE - FORELEG PARESIS
14-Dec-94	899	PROGRESSIVE HIND LEG WEAKNESS
14-Dec-94	900	
15-Dec-94	896	
04-Jan-95	944	
04-Jan-95	946	AT SURFACE - MILD ATAXIA PERSISTS
05-Jan-95	947	AT SURFACE - RAN ON TREADMILL, MILD ATAXIA
05-Jan-95	945	
06-Jan-95	949	
06-Jan-95	948	
10-Jan-95	978	
10-Jan-95	979	TRANSIENT SIGNS HIND LEGS, NORMAL TREADMILL
12-Jan-95	981	
12-Jan-95	980	
13-Jan-95	983	AT SURFACE - RIGHT FORELEG PARESIS
13-Jan-95	982	
18-Jan-95	503	AT SURFACE - QUADRA PARESIS
18-Jan-95	505	
19-Jan-95	506	
19-Jan-95	507	SENSORY SIGNS IN HIND LEGS - NO WEAKNESS
20-Jan-95	502	BILATERAL HIND LEG WEAKNESS
20-Jan-95	504	
24-Jan-95	533	UNEQUIVOCAL RIGHT HIND LEG WEAKNESS, RESOLVED IN 1 HOUR
24-Jan-95	536	AT SURFACE - FORE AND HIND LEG PARESIS
25-Jan-95	534	
25-Jan-95	532	TREADMILL BUT RIGHT HIND LEG REMAINS LAME
26-Jan-95	535	AT SURFACE - QUADRAPARESIS. DIED AT 10 MIN.
26-Jan-95	537	
31-Jan-95	260	
31-Jan-95	262	
01-Feb-95	261	
01-Feb-95	257	
02-Feb-95	259	EARLY SKIN DCS (ENTIRE BODY). HIND LEG WEAKNESS. VOCAL STRUGGLING

02-Feb-95	258	
11-Apr-95	734	SEVERE HIND LEG WEAKNESS; LEFT SHOULDER, RIGHT HIND LEG, RIGHT LOWER BACK SKIN DCS
11-Apr-95	735	TREADMILL @ 4.0 MPH; NO GAIT DISTURBANCES
11-Apr-95	738	TREADMILL @ 4.0 MPH; NO GAIT DISTURBANCES
12-Apr-95	733	ABLE TO STAND BUT WEAKNESS AND ATAXIA OF HIND LEGS
13-Apr-95	736	AT SURFACE - ABLE TO STAND BUT HIND LEG ATAXIA
13-Apr-95	737	TREADMILL @ 4.0 MPH; NO GAIT DISTURBANCES
18-Apr-95	923	WEAKNESS OF BOTH HIND LEGS
18-Apr-95	927	
19-Apr-95	926	
19-Apr-95	929	
20-Apr-95	928	AT SURFACE - PARAPLEGIC
20-Apr-95	925	UNEQUIVOCAL LEFT HIND WEAKNESS, RESOLVED BY 1 HR.
25-Apr-95	420	AT SURFACE - QUADRAPLEGIC
25-Apr-95	421	
26-Apr-95	417	
26-Apr-95	418	LEFT WEAKNESS. FLACCID PARALYSIS HIND LEG (NEURO HIT). EUTHANIZED
03-May-95	821	HIND LEG ATAXIA / ABLE TO WALK
03-May-95	823	SENSORY SIGNS BOTH HIND LEGS, NO WEAKNESS
04-May-95	822	HIND LEG WEAKNESS PROGRESSED TO QUADRAPLEGIA
04-May-95	824	TREADMILL @ 4.0 MPH; NO GAIT DISTURBANCES
10-May-95	11	ATAXIA, RIGHT HIND WEAKNESS, UNABLE TO STAND
10-May-95	7	FORE AND HIND LEG WEAKNESS AT SURFACE
11-May-95	8	
11-May-95	12	
16-May-95	28	WEAKNESS RIGHT HIND LEG. CAN STAND, WEAK
16-May-95	33	
17-May-95	29	AT SURFACE - TETRAPARESIS
17-May-95	30	FORELEG WEAKNESS PROGRESSES TO QUADRAPARESIS
18-May-95	31	HIND LEG WEAKNESS, CAN WALK BUT ATAXIC, NYSTAGMUS BILATERAL FAST PHASE
18-May-95	32	
23-May-95	39	AT SURFACE - PARAPLEGIC
23-May-95	38	RIGHT FORELEG WEAKNESS / WEAKNESS BUT ABLE TO STAND
24-May-95	35	AT SURFACE - QUADRAPLEGIA. DIED - RESPIRATORY ARREST
24-May-95	34	LUMBAR HEMORRHAGE IN CORD
26-May-95	37	FRONT LEG WEAKNESS, UNABLE TO STAND
26-May-95	36	
31-May-95	42	KICKING; SQUEALING; DEVELOPED DISTRESS AND WEAKNESS; LUMBAR / SACCRAL
31-May-95	41	HIND LEG WEAKNESS. ABLE TO STAND
02-Jun-95	40	ATAXIA, WEAKNESS HIND LEGS; VOMITING
28-Jun-95	381	BOTH HIND LEG WEAKNESS; SKIN DCS ON BACK

28-Jun-95	384	WEAKNESS HIND LEGS
01-Aug-95	341	CONVULSION DURING DECOMPRESSION; SEDATION; EUTHANIZED
01-Aug-95	342	
08-Aug-95	361	ATAXIC (BOTH HIND LEGS, RIGHT LESS THAN LEFT), SKIN DCS < 1% SURFACE AREA
09-Aug-95	363	HIND LEG WEAKNESS. SKIN DCS BACK OF HEAD & PATCHING ON LEGS
09-Aug-95	362	ATAXIA; SPLAYED HIND LEGS
10-Aug-95	364	
10-Aug-95	365	ATAXIC - HIND & FORE LEG WEAKNESS. UNABLE TO STAND; EUTHANIZED
10-Aug-95	360	
17-Aug-95	379	
17-Aug-95	378	
22-Aug-95	376	SCRATCHING, MILD LAMENESS
22-Aug-95	374	
23-Aug-95	377	UNSTEADY, STAGGERS. INCREASED RESPIRATION RATE. UNWILLING TO TREADMILL
23-Aug-95	375	ABLE TO WALK; LAME HIND LEGS
24-Aug-95	393	CAN STAND BUT WEAK; ATAXIC LEFT HIND LEG
24-Aug-95	394	MINOR SKIN DCS
29-Aug-95	201	MILD ATAXIA / WEAKNESS LEFT HIND LEG
29-Aug-95	400	
30-Aug-95	397	NORMAL TREADMILL AT 1 HOUR
30-Aug-95	396	CAN STAND AND WALK BUT LAME LEFT FORELEG
31-Aug-95	398	NORMAL TREADMILL
31-Aug-95	399	ATAXIC HIND LEGS
06-Sep-95	207	SKIN DCS ON BACK; LAME RIGHT HIND LEG
06-Sep-95	209	MINOR SKIN DCS; NO MALAISE, SKIN BEND - LEFT FRONT SHOULDER
07-Sep-95	210	FORE AND HIND LEG PARESIS
07-Sep-95	208	MILD ATAXIA; STANDS, WALKS, MINOR SKIN DCS ON LEG AND SNOUT
19-Sep-95	248	
19-Sep-95	249	CAN STAND AND WALK , BUT MILD ATAXIA
20-Sep-95	247	
20-Sep-95	246	MINIMAL SKIN DCS. NORMAL TREADMILL AT 1 HOUR
21-Sep-95	250	RIGHT HIND LEG PARESIS
26-Sep-95	251	
03-Oct-95	60	4.0 MPH ON TREADMILL; NO OBVIOUS LIMP / ATAXIA
03-Oct-95	61	TREADMILL @ 4.0 MPH; NO GAIT DISTURBANCES
04-Oct-95	63	INCREASING RESPIRATION RATE, SHIVERING, RIGHT HIND LEG KICKING TO LAMENESS
04-Oct-95	62	TREADMILL @ 4 MPH; NO GAIT DISTURBANCES
05-Oct-95	58	WIDESPREAD SKIN DCS; SOME LEG LIFTING
05-Oct-95	59	TREADMILL @ 4 MPH; NO GAIT DISTURBANCES
11-Oct-95	294	
11-Oct-95	295	

12-Oct-95	293	ATAXIC	
12-Oct-95	296		
07-Nov-95	139	WOULD NOT RUN @ 4.0 MPH / NO APPARENT GAIT ABNORMALTIES	
07-Nov-95	144	NO OBJECTIVE ABNORMALITY	
08-Nov-95	141	SOME LEG LIFTING; EARLY MALAISE / VOMITING	
08-Nov-95	143	EAR PROBLEMS; EARLY ATAXIA	
09-Nov-95	140	PERSISTENT ATAXIA (HIND LEGS)	
09-Nov-95	142	NO ATAXIA; TREADMILL 4.0 MPH	
14-Nov-95	164	NO NEURO WEAKNESS NOTED	
14-Nov-95	166	NO HARD NEUROLOGICAL DEFICITS	
16-Nov-95	163	DEFINITE NEURO, MILD ATAXIA (HIND LEGS), STAGGERING.	
16-Nov-95	168	TOTAL BODY SKIN DCS, NYSTAGMUS, FALLING, CENTRAL NEURO	
17-Nov-95	167	GROSSLY ATAXIC; WEAK HIND LEGS, NOT SEDATED	
17-Nov-95	165	DEFINITE NEURO; ABLE TO STAND BUT ATAXIA IN HIND LEGS	
30-Nov-95	190	MILD ATAXIA , NEURO; NYSTAGMUS	
30-Nov-95	193		
01-Dec-95	191		
01-Dec-95	194		
05-Dec-95	24	UNSTEADY, ATAXIC	
05-Dec-95	26		
06-Dec-95	29		
06-Dec-95	25		
07-Dec-95	27		
07-Dec-95	28	NEURO WEAKNESS	
12-Dec-95	37	RIGHT HIND LEG STIFF (NO FLEXION), TEETH GRINDING, PERSISTENT ATAXIA	
12-Dec-95	38	PERSISTENT ATAXIA RIGHT HIND LEG, SHIVERING, VOMITING	
13-Dec-95	35		
13-Dec-95	36	SEVERE ATAXIA, SEVERE DISTRESS	
14-Dec-95	40	MILD ATAXIA (STAGGERED TO RIGHT) ; TREADMILLED ONLY 1.5 MPH	
14-Dec-95	39		
17-Jan-96	74	ATAXIA, FELL, LEFT SIDE; TREADMILLED @ 1.4 MPH	
17-Jan-96	73	TREADMILL NO EVIDENT WEAKNESS	
18-Jan-96	71	(6.0)GROSSLY UNSTEADY; (10.0)TEETH GRINDING; (75.0)TREADMILLED UNSUCCESSFUL. EAR PROBLEMS CONTRIBUTED TO PROBLEMS. (NO HEAD SHAKING); ATAXIA	
18-Jan-96	72	(1.0)GROSSLY UNSTEADY; (44.0)REFUSES TO STAND; (60.0)SKIN BEND 4X8. WEAKNESS (R) HIND, (L) FORELIMB; ATAXIA	
23-Jan-96	76	TREADMILLED WITH EVIDENT WEAKNESS; SOME TEETH GRINDING POST TREADMILL; (2.0)SMALL SKIN BEND	
23-Jan-96	75	(2.0) LARGE SKIN BEND; (4.0)SKIN BEND 18X35; (10.0)LEG LIFTING; (71.0)SOME SHIVERING. LEFT SIDED WEAKNESS, TEETH GRINDING. ATAXIA, UNABLE TO STAND.	
24-Jan-96	401	(2.0)SKIN BEND; (4.0)EATING FINE; (75.0)TREADMILLED FINE	
30-Jan-96	402	(1.67)UNSTEADY; (4.67)EATING; (34.0)LAYING DOWN, REFUSES TO WALK BUT WILL STAND, ATAXIA	
30-Jan-96	404	(1.83)FALLING SIDE TO SIDE; (5.0)EATING; (60.0)UNSTEADY GAIT, ZERO SKIN DCS; PERSISTENT MILD ATAXIA	



31-Jan-96	420	(60.0)TREADMILLED WITHOUT DIFFICULTY
31-Jan-96	422	(1.0)UNSTEADY GAIT; (60.0)TREADMILLED WITHOUT DIFFICULTY. PERSISTENT MILD GLOBAL ATAXIA. TREADMILLED 4.0 MPH.
01-Feb-96	403	(2.0)GROSSLY UNSTEADY, WIDE STANCE; (70.0)TREADMILLED WITHOUT EVIDENT WEAKNESS. PERSISTENT MODERATE ATAXIA
01-Feb-96	421	(1.0)UNSTEADY GAIT; (60.0)TREADMILLED WITHOUT DIFFICULTY
06-Feb-96	433	(1.5)SKIN BEND; (4.5)HEAD SHAKING; (53.0)WALKING AROUND, NO HEAD SHAKING NOTED; (68.0)TREADMILLED FINE. EAR SIGNS & SYMPTOMS. MILD, PERSISTENT ATAXIA, NORMAL TREADMILL
06-Feb-96	435	(2.0)GROSSLY UNSTEADY; (3.0)GRUNTING LOUDLY, NYSTAGMUS; (17.0) VERY AGITATED; (60.0)TREADMILLED FINE. PERSISTENT ATAXIA. NYSTAGMUS (EAR SIGNS / SYMPTOMS). TREADMILLED @ 4 MPH.
07-Feb-96	430	(15.0)TOTALLY WELL; (60.0)TREADMILLED FINE
07-Feb-96	437	MALAISE (VOMITED). PERSISTENT ATAXIA
08-Feb-96	432	(2.0)SKIN BEND; (11.0)EATING, HEAD SHAKING; (28.0)SOME SHIVERING; (60.0)TREADMILLED FINE. EAR SIGNS & SYMPTOMS; ATAXIA
08-Feb-96	431	(1.5)WALKED INTO PEN; (62.0)TREADMILLED FINE
13-Feb-96	87	(1.0)WALKED INTO PEN, SKIN DCS; (6.0)HEAD SHAKING, EATING; (60.0)TREADMILLED FINE.@ 4 MPH; MINOR SKIN DCS
13-Feb-96	86	(1.0)PULLED INTO PEN, HEAD SHAKING, SKIN BEND; (15.0)OCCASIONAL UNSTEADINESS, CHOMPING, IGNORES FOOD, NO WEAKNESS; (60.0)TREADMILLED AND LEANED TO RIGHT, NO WEAKNESS, STILL NOT INTERESTED IN FOOD. MILD ATAXIA, PERSISTENT EAR SIGNS
14-Feb-96	84	(2.0)WALKED INTO PEN, SMALL SKIN DCS; (62.0) TREADMILLED FINE
14-Feb-96	88	BOTH FRONTAL LEG WEAKNESS, FLEXED FRONT & HIND LEGS; AIR BANK PROBLEM, PLUNGED TO 350 FSW
15-Feb-96	85	(2.0)WALKED INTO PEN; (6.0)MILD ATAXIA; (102.0)COMPLETELY FELL WITH ONLY A MILD HEAD SHAKING
15-Feb-96	83	(2.0)PULLED INTO PEN; (6.0)UNSTEADY; (47.0)TREADMILLED NOT QUITE UP TO 4.0 MPH STANDARD; ATAXIA, WEAKNESS, FALLING LEFT
21-Feb-96	453	(1.0)WALKED INTO PEN, UNSTEADY, SKIN BEND; (60.0)TREADMILLED WITH SOME UNSTEADINESS, BUT NO WEAKNESS; MILD ATAXIA, PERSISTENT
21-Feb-96	454	(2.0)PULLED INTO PEN; (5.0)EATING; (70.0)TREADMILLED @ 4 MPH FINE.
22-Feb-96	455	(2.0)WALKED INTO PEN; (4.0)GRUNTING LOUDLY. TREADMILL @ 4.0 MPH WITH NO DIFFICULTIES
22-Feb-96	452	(2.0)PULLED INTO PEN; (10.0)EATING; (96.0)TREADMILLED AND DID NOT MAKE IT TO 4.0 MPH. PERSISTENT MILD ATAXIA
23-Feb-96	457	(2.0)PULLED INTO PEN, UNSTEADY, NYSTAGMUS; (7.0)HEAD SHAKING; (60.0)TREADMILLED WITH EVIDENT WEAKNESS. POSSIBLE MILD HIT. (PERSISTENT MILD ATAXIA). EAR SIGNS/SYMPTOMS
23-Feb-96	456	(60.0)TREADMILLED FINE. TREADMILL @4.0 MPH WITH NO DIFFICULTIES
27-Feb-96	482	(2.0)WALKED INTO PEN; (4.0)SHOOK HEAD ONCE, EATING, SKITTISH; (10.0)STILL HEAD SHAKING; (15.0)SCRATCHING; (66.0)TREADMILLED WITHOUT DIFFICULTY
27-Feb-96	480	(2.0)WALKED INTO PEN; (7.0)MILD SHAKINESS; (12.0)SHOOK HEAD ONCE; (60.0)TREADMILLED WITHOUT DIFFICULTY
28-Feb-96	483	(2.0)PULLED INTO PEN, EATING; (60.0)TREADMILLED FINE
28-Feb-96	481	(1.78)PULLED INTO PEN; (3.0)REFUSES TO STAND; (30.0)SEVERE CONTINUOUS ATAXIA ; (73.0)TREADMILLED AT 4.0 MPH; WITH ATAXIA; SEVERE ATAXIA
29-Feb-96	484	(1.0)WALKED INTO PEN, UNSTEADY; (6.0)STANDING WITH WIDE STANCE GAIT; (19.0)SHOOK HEAD ONCE; (21.0)VOMITTED; (60.0)TREADMILLED WITH MILD ATAXIA BUT NO EVIDENT WEAKNESS. MILD ATAXIA. MINIMAL MALAISE. MILD HIT.
29-Feb-96	479	(1.83)STAGGERED INTO PEN; (3.0)SHIVERING; (7.0)SKIN DCS; (60.0)TREADMILLED WITH ATAXIA BUT NO EVIDENT WEAKNESS. SHIVERING

05-Mar-96	499	(1.58)PULLED INTO PEN, SKIN DCS; (60.0)TREADMILLED WITH DIFFICULTY. ATAXIA RESOLVED AFTER 1 HR.
05-Mar-96	497	(2.0)WALKED INTO PEN; (20.0)SHOOK HEAD SEVERAL TIMES; (40.0)HEAD SHAKING; (60.0)TREADMILLED WITHOUT DIFFICULTY
06-Mar-96	495	(1.97)FALLING AND STAGGERING; (11.0)SHOOK HEAD ONCE; (60.0)TREADMILLED EXCELLENT. UNSTEADY L & R HIND. POSSIBLE MILD HIT (SPONTANEOUS RESOLUTION).
06-Mar-96	498	(2.0)PULLED INTO CAGE; (20.0)GRINDING TEETH; (60.0)TREADMILLED EXCELLENT
07-Mar-96	494	(1.83)PULLED INTO PEN, SHIVERING; (5.0)HEAD BOBBING; (60.0)HEAD BOBBING STILL PRESENT, UNABLE TO TREADMILL DUE TO POOR COORDINATION OF FORE LIMBS
07-Mar-96	496	(1.0)PULLED INTO CAGE, SHOOK HEAD; (2.0)EATING, HEAD SHAKING; (15.0)WALKING, HEAD SHAKING; (60.0)TREADMILLED WITHOUT DIFFICULTY
12-Mar-96	529	(1.0)WALKED INTO PEN; (3.0)SHOOK HEAD ONCE; (60.0)TREADMILLED WITHOUT DIFFICULTY
12-Mar-96	527	(2.0)PULLED INTO PEN, UNSTEADY; (20.0)WIDE BASED STANCE, UNSTEADY STILL; (60.0)TREADMILLED BUT HAD DIFFICULTY MAINTAINING 4.0 MPH. UNSTEADY, WIDE BASE STAND. SEVERE ATAXIA
13-Mar-96	531	(1.0)PULLED INTO CAGE; (8.0)LIMPS, FALLING TO RIGHT SIDE, SHOOK HEAD; (74.0)TREADMILLED WITH DIFFICULTY MAINTAINING 4.0 MPH. DRAGGING RIGHT & LEFT HIND LEGS. MILD ATAXIA, PERSISTENT
13-Mar-96	526	(1.92)WALKED INTO PEN; (4.0)SHOOK HEAD ONCE; (60.0)TREADMILLED FINE, BUT VERY VOCAL. TREADMILLED @ 4 MPH. VOCAL, OCCASIONAL MISSTEP(QUESTIONABLE MILD HIT)
14-Mar-96	530	(1.92)PULLED INTO PEN; (5.0)VERY TIMID, FLIGHTY; (6.0)SHIVERING; (60.0)TREADMILLED AT 4.0 MPH WITHOUT DIFFICULTY
14-Mar-96	528	(1.88)WALKED INTO PEN, SHOOK HEAD ONCE; (20.0)SOME STUMBLING NOTED WITH HEAD SHAKING; (60.0)TREADMILLED EXCELLENT
19-Mar-96	90	(2.0)PULLED INTO PEN; (10.0)SHAKING HEAD, AND SCRATCHING; (60.0)TREADMILLED NO PROBLEMS. EAR SIGNS/SYMPTOMS; TREADMILLED @ 4.0 MPH
19-Mar-96	94	(2.0)PULLED INTO PEN, FALLING SIDE TO SIDE; (4.0)UNABLE TO STAND; (60.0)REMAINS UNABLE TO STAND. FALLING LEFT TO RIGHT. NYSTAGMUS BOTH; SEVERE ATAXIA
20-Mar-96	93	(1.97)WALKED INTO PEN; (60.0)TREADMILLED 4.0 MPH, NO PROBLEMS
20-Mar-96	91	(2.0)WALKED INTO PEN, MILD UNSTEADINESS WITH HEAD SHAKING; (9.0)UNSTEADY WITH HEAD SHAKING; (60.0)TREADMILLED A 4.0 MPH WITHOUT DIFFICULTY. EAR SIGNS / SYMPTOMS
21-Mar-96	92	(2.83)WALKED INTO PEN, UNSTEADY; (20.0)HEAD SHAKING. (MILD, PERSISTENT ATAXIA)
21-Mar-96	89	(2.0)PULLED INTO PEN, GROSSLY UNSTEADY AND UNABLE TO STAND; (4.0)NYSTAGMUS PRESENT, EATING, SKIN DCS; (19.0)NOW ABLE TO STAND. UNSTEADY GAIT; (PERSISTENT MILD ATAXIA)
26-Mar-96	544	(2.0)PULLED INTO PEN, UNABLE TO STAND; (4.0)SKIN DCS; (60.0)EUTHANIZED
26-Mar-96	547	(2.0)WALKED INTO PEN; (7.0)EATING; (12.0)SHOOK HEAD TWICE, SCRATCHING; (60.0)TREADMILLED WELL AT 4.0 MPH
27-Mar-96	545	(1.38) WALKED IN STEADILY; (9.73)SHAKING OF HEAD; (69.92)TREADMILLED 4.0 MPH EXCELLENT
27-Mar-96	546	(1.97)WALKED INTO PEN, EATING, SKIN DCS, HEAD SHAKING; (5.0)SCRATCHING RUMP ON SIDE OF CAGE; (70.0)TREADMILLED WELL AT 4.0 MPH
28-Mar-96	548	SWOLLEN FT
28-Mar-96	543	(2.0)PULLED INTO PEN, SKIN DCS, REFUSES TO STAND; (60.0)UNABLE TO TREADMILL. ROLLING L TO R. UNABLE TO STAND. WEAKNESS. SEVERE ATAXIA
09-Apr-96	593	(1.0)WALKED INTO PEN; (2.0)EATING, HEAD SHAKING; (105.0)TREADMILLED WELL @ 4.0 MPH
09-Apr-96	592	(2.0)WALKED INTO PEN; (4.0)SHAKING HEAD VIGOROUSLY; (35.0)HEAD SHAKING; (60.0)TREADMILLED AT 4.0 MPH WELL
10-Apr-96	594	(2.0)PULLED INTO PEN; (5.0)RELUCTANT TO STAND; (15.0)REFUSES TO STAND; (60.0)UNABLE TO TREADMILL. UNSTEADY. (SEVERE ATAXIA)

10-Apr-96	590	(1.0)PULLED INTO PEN, UNABLE TO STAND, HEAD SHAKING; (2.83)TRY TO STAND UNSUCCESSFULLY; (4.97)SKIN BENDS; (60.0)UNABLE TO TREADMILL; SEVERE ATAXIA
11-Apr-96	589	(1.0)PULLED INTO CAGE, SHIVERING, STEADY GAIT; (3.0)EATING; (60.0)TREADMILLED WELL
11-Apr-96	591	(3.18)PULLED INTO PEN, UNSTEADY, SHIVERING, SKIN BEND; (10.0)VERY VOCAL; (20.0)REFUSED TO STAND, VOCALIZING; (30.0)EATS FOR A SECOND, WIDE STANCE; (60.0)WILL NOT USE HIND LEGS TO TREADMILL; ATAXIA
18-Apr-96	7	(2.0)WALKED INTO CAGE, SKIN BEND, HEAD SHAKING; (50.0)TREADMILLED EXCELLENT
18-Apr-96	1	(1.0)WALKED INTO CAGE, EATING; (5.0)SHIVERING; (16.0)HEAD SHAKING; (60.0)TREADMILLED WITHOUT DIFFICULTY
19-Apr-96	5	(3.03)WALKED INTO PEN,EATING; (60.0)TREADMILLED WITH NOTICEABLE LIMP. WEAKNESS; LIMP IN LEFT HIND LEG, LOUD VOCALIZATION
19-Apr-96	2	(2.33)WALKED INTO PEN, EATING; (60.0)TREADMILLED AT 4.0 MPH WITHOUT DIFFICULTY
23-Apr-96	3	(1.0)PULLED INTO PEN, UNSTEADY, KNEELING, SKIN BEND; (60.0) UNABLE TO TREADMILL BEYOND 2.0 MPH. PERSISTENT ATAXIA
23-Apr-96	4	(2.0)WALKED INTO PEN; (6.0)HEAD SHAKING; (60.0)TREADMILLED AT 4.0 MPH WITH DIFFICULTY
24-Apr-96	719	(1.75)WALKED INTO PEN, STANDING WITH DIFFICULTY; (3.0)HEAD SHAKING,EATING; (10.0)SKIN BEND; (30.0)HEARD GRINDING OF TEETH; TREADMILLED @ 4.0 MPH; NO GAIT DISTURBANCES
24-Apr-96	722	(3.0)PULLED INTO PEN, SHIVERING; (5.0)WALKING WITH DIFFICULTY; (20.0)ALL FOUR FEET APPEAR SKIN BENT; (25.0)SHIVERING STILL; TREADMILL @ 4.0 MPH; NO GAIT DISTURBANCES
25-Apr-96	720	(3.73)PULLED INTO PEN, UNSTEADY, TREMBLING, SKIN BEND; (68.0)UNABLE TO TREADMILL. PERSISTENT ATAXIA
25-Apr-96	721	(1.83)PULLED INTO PEN, UNSTEADY, SHIVERING; (6.0)GLOBAL ATAXIA, EATING; (8.0)WIDE LEG STANCE; (60.0)GLOBAL ATAXIA. UNABLE TO TREADMILL; PERSISTENT ATAXIA
07-May-96	750	(1.9)WALKED INTO PEN; (7.0)SHIVERING; (17.0)HEAD SHAKING, FALLING TO KNEES; (62.0)UNABLE TO TREADMILL, SECONDARY ATAXIA. PERSISTENT MILD ATAXIA. UNABLE TO TREADMILL GT 2.0 MPH
07-May-96	752	(2.0)UNABLE TO WALK OUT OF CAGE; (3.0)SKIN BEND; (5.0)SEVERELY UNSTEADY; (10.0)UNABLE TO STAND; (30.0)SEDATED AND EUTHANIZED. SEVERE ATAXIA / WEAKNESS; SEDATED
08-May-96	751	(2.0)PULLED INTO PEN, UNSTEADY, GRUNTING LOUDLY; (20.0)REFUSES TO USE FRONT LEGS TO STAND, EATING, SHIVERING; (70.0)TREADMILLED FINE. ATAXIA RESOLVED IN 1 HOUR
08-May-96	747	(2.0)WALKED INTO PEN, EATING; (60.0)TREADMILLED FINE. TREADMILLED @ 4.0 MPH; NO GAIT DISTURBANCES
09-May-96	749	(2.0)WALKED INTO PEN, EATING, ANIMAL IN GOOD CONDITION. TREADMILLED @ 4.0 MPH; NO GAIT DISTURBANCES
09-May-96	748	(2.0)PULLED INTO PEN, UNSTEADY WITH HEAD BOBBING; (5.0)TEETH GRINDING,VOMITING, SKIN BEND; (10.0)TEETH GRINDING; (60.0)POOR TREADMILL AT 2.0 AND 4.0 MPH. PERSISTENT MILD ATAXIA
14-May-96	771	(2.0)PULLED INTO PEN, UNSTEADY, WIDE BASE STANCE; (38.0)FELL COMPLETELY TO LEFT; (60.0)TREADMILLED; ZERO PROBLEMS. SOME SQUEELING THOUGH. TRANSIENT ATAXIA; RESOLVED AFTER 1 HOUR
14-May-96	772	(1.83)PULLED INTO PEN; (4.0)EATING; (60.0)TREADMILLED WELL. TREADMILLED @ 4.0 MPH; NO GAIT DISTURBANCES
15-May-96	775	(2.0)PULLED INTO PEN, UNSTEADY; (5.0)STUMBLING, EATING; (60.0)TREADMILLED @ 4.0 MPH. ATAXIA (PERSISTENT)
15-May-96	773	(2.0)PULLED INTO PEN, UNABLE TO STAND; (6.0)SEVERE NYSTAGMUS, SHIVERING, SKIN BEND; (9.0)UNSTEADY, SHAKY; (13.0)MALAISE; (60.0)TREADMILLED WITH EVIDENT WEAKNESS. PERSISTENT ATAXIA; SEVERE NYSTAGMUS
16-May-96	776	(2.0)PULLED INTO PEN, UNSTEADY, EATING; (14.0)SHOOK HEAD AND STUMBLING; (60.0)TREADMILLED WITH WEAKNESS, VERY VOCAL AND COORDINATION LOWERED. TREADMILLED @ 4.0 MPH; DECREASED COORDINATION EVIDENT/ EAR SIGNS
16-May-96	774	(2.0)PULLED INTO PEN; (10.0)UNSTEADY,EATING; (60.0)TREADMILLED @ 4.0 MPH WITH MILD PERSISTENT ATAXIA
21-May-96	786	PIG FOUND EXPIRED IN CHAMBER UPON SURFACING. SKIN BEND NOTED.

22-May-96	784	(2.0)PULLED INTO PEN, UNSTEADY, SHIVERING, EATING; (60.0)WALKS, EATS. PERSISTENT ATAXIA
23-May-96	785	(2.0)PULLED INTO CAGE, UNABLE TO STAND, SKIN BEND, GRUNTING; (27.0)SHIVERING; (60.0)UNABLE TO TREADMILL. SEVERE ATAXIA
23-May-96	788	(1.0)PULLED INTO PEN, EATS; (6.0)FELL TO RIGHT COMPLETELY; (60.0)TREADMILLED WITH SOME WEAKNESS TREADMILL @ 4.0 MPH; WITH WEAKNESS; PERSISTENT MILD ATAXIA
28-May-96	787	(1.0)UNABLE TO WALK INTO PEN, SKIN BEND, BLOOD ON NOSE AND EYE; (3.0)UNABLE TO STAND; (10.0)LAMINECTOMY FOR BUBBLE DETECTION. SEVERE ATAXIA (WEAKNESS, FALLING TO LEFT & RIGHT)
29-May-96	789	(2.0)PULLED INTO PEN, HAS HIND LEG WEAKNESS, DIFFICULTY STANDING; (30.0)LAMINECTOMY FOR BUBBLE DETECTION.
30-May-96	796	CONTROL PIG; LAMINECTOMY FOR BUBBLE DETECTION PERFORMED. NO DIVE PERFORMED
04-Jun-96	797	(2.0)PULLED INTO PEN, EATING; (5.0)SKIN BEND; (10.0)WALKING WITH DIFFICULTY; (33.0)HEAD SHAKING; (50.0)SKIN BEND FADING. EAR PROBLEMS NOTED; TREADMILL @ 4.0 MPH; NO PROBLEMS NOTED
04-Jun-96	795	(2.0)PULLED INTO PEN, UNSTEADY, UNABLE TO STAND; (5.0)DOES NOT EAT, REFUSES TO STAND, GRUNTING; (915.0)EATS WHEN OFFERED FOOD, STILL UNABLE TO STAND; (71.0)UNABLE TO TREADMILL. SEVERE ATAXIA
05-Jun-96	794	(1.83)PULLED INTO PEN, UNABLE TO STAND, DOWN ON FRONT KNEES, SHIVERING; (20.0)UNABLE TO STAND; (60.0)TREADMILLED POORLY AND ALL FOUR LEGS HAVE WEAKNESS. SEVERE ATAXIA
05-Jun-96	798	(1.75)PULLED INTO PEN; (3.0)SOME REAR HIND WEAKNESS; (10.0)EATING; (12.0)VOMITING; (17.0)VOMITING; (27.0)VOMITING; (30.0)TREADMILLED WITH ZERO PROBLEMS NOTED. TRANSIENT ATAXIA
11-Jun-96	663	(1.99)PULLED INTO CAGE, UNSTEADY; (5.0)EATING, SHIVERING; (20.0)GRINDING TEETH LOUDLY; (50.0)VOMITING, TEETH GRINDING, EUTHANIZED. MODERATE TO SEVERE ATAXIA
11-Jun-96	659	(2.0)PULLED INTO CAGE, EATING; (60.0)TREADMILLED WITH NO PROBLEMS
13-Jun-96	662	PERSISTENT ATAXIA
13-Jun-96	661	(2.0)ASSISTED INTO PEN; (10.0)EATING; (60.0)TREADMILLED AT 4.0 MPH WITHOUT DIFFICULTY
18-Jun-96	658	(2.0)PULLED INTO PEN; (10.0)SKIN BEND; (32.0)MINIMAL ATAXIA
18-Jun-96	660	(2.13)WALKED INTO PEN, EATING; (60.0)TREADMILLED FINE
19-Jun-96	812	(2.0)WALKED INTO PEN, EATING; (60.0)TREADMILLED WITHOUT DIFFICULTY TREADMILLED @ 4.0 MPH; NO PROBLEMS NOTED
19-Jun-96	808	(2.0)WALKED INTO PEN; (4.0)EATING; (60.0)TREADMILLED WITHOUT DIFFICULTY. MALAISE AND ANOREXIA NOTED; TREADMILLED @ 4.0; NO DISTURBANCES IN GAIT
20-Jun-96	811	(2.0)WALKED INTO PEN, SQUALLING LOUDLY, EATING; (19.0)LAYING WITH SHIVERING; (60.0)TREADMILLED FINE, BUT VERY VOCAL. SOME SHIVERING NOTED; NOISY TREADMILL @ 4.0 MPH
20-Jun-96	807	(2.0)PULLED INTO PEN, EATING, STUMBLES SOMEWHAT; (60.0)TREADMILLED POORLY, VERY NOISY. TRANSIENT MILD ATAXIA
25-Jun-96	809	(2.0)WALKED INTO PEN, SHAKING HEAD, EATING; (19.0)SCRATCHING; (65.0)TREADMILLED FINE, EFFORT QUESTIONABLE. SOME SCRATCHING NOTED; 4.0 MPH ON TREADMILL
25-Jun-96	810	(2.0)WALKED INTO PEN; (5.0)GRUNTING LOUDLY; (65.0)TREADMILLED VERY NOISY BUT NO GAIT PROBLEMS. TREADMILLED @ 4.0 MPH; NO PROBLEMS NOTED
26-Jun-96	204	(1.0)WALKED INTO PEN, EATING; (5.0)SKIN BEND; (64.0)TREADMILL WITHOUT DIFFICULTY
26-Jun-96	203	(1.0)PULLED INTO PEN, SHIVERING; (3.0)NO INTEREST IN FOOD; (14.0)INCREASE IN APPETITE; (24.0)SHIVERING NOTICED; (62.0)TREADMILLED GOOD, RESISTED AT FIRST
27-Jun-96	201	(1.0)WALKED INTO PEN; (5.0)EATING; (22.0)SCRATCHING; (32.0)SCRATCHES MORE; (43.0)MORE SCRATCHING; (64.0)TREADMILLED WITHOUT DIFFICULTY
27-Jun-96	202	(1.0)PULLED INTO PEN; (62.0)TREADMILLED WITHOUT DIFFICULTY OR GAIT DISTURBANCE

09-Jul-96	905	(2.0)WALKED INTO PEN, EATING; (4.0)SHIVERING; (5.0)KICKING LEFT HIND LEG; (8.0)KICKING RIGHT HIND LEG AND ALSO HEADSHAKING; (63.0)TREADMILLED WITHOUT DIFFICULTY
09-Jul-96	907	(2.0)PULLED INTO PEN, UNSTEADINESS, GRUNTING LOUDLY; (12.0)POOR APPETITE; (62.0)TREADMILLED VERY POORLY
10-Jul-96	906	(1.0)PULLED INTO PEN; (5.0)ATAXIA; (10.0)STUMBLING; (36.0)STILL STUMBLING; (63.0)TREADMILLED WITH POOR RESULTS, STILL STUMBLING, WEAKNESS. SEVERE ATAXIA. POOR TREADMILL
10-Jul-96	908	(1.0)WALKS INTO PEN, EATING; (64.0)TREADMILLED WITHOUT DIFFICULTY
11-Jul-96	909	(1.0)WALKED INTO PEN, EATING, MILD SHIVERING; (27.0)ATTEMPTS MADE AT SCRATCHING TORSO; (65.0)TREADMILLED WITH GOOD RESULTS, TOOK A MINUTE TO REACH BEST EFFORT
11-Jul-96	910	(1.0)WALKED INTO PEN; (12.0)NO APPETITE; (62.0)TREADMILLED WITHOUT DIFFICULTY
18-Jul-96	911	(1.0)WALKED INTO PEN, EXTENSIVE SKIN BEND, NO ATAXIA; (14.0)POOR APPETITE; (37.0)SKIN DCS STARTING TO LIGHTEN, VIGOROUS ROOTING AND EATING; (63.0)TREADMILLED WITH NOTICEABLE GAIT ABNORMALITY
18-Jul-96	916	(1.0)PULLED INTO PEN, NO EATING; (10.0)POOR APPETITE, NO ATAXIA; (63.0)TREADMILLED WITH ACCEPTABLE RESULTS
19-Jul-96	914	
19-Jul-96	912	(2.0)PULLED INTO PEN, HEADSHAKING; (9.0)VIGOROUS ROOTING; (63.0)TREADMILLED WITHOUT DIFFICULTY
23-Jul-96	913	(1.0)WALKED INTO PEN, HEAD SHAKING; (6.0)EATING, SOME SHIVERING; (15.0)OCCASIONAL HEAD SHAKING, SOME SCRATCHING; (45.0)HEAD SHAKING; (64.0)TREADMILLED WITH GOOD RESULTS
23-Jul-96	915	(1.0)PULLED INTO PEN; (4.0)EATING; (64.0)TREADMILLED GOOD, NO GAIT PROBLEMS
24-Jul-96	922	(1.0)WALKED INTO PEN, HEAD SHAKING; (4.0)EATING; (10.0)HEAD SHAKING; (65.0)TREADMILLED WITH ACCEPTABLE RESULTS
24-Jul-96	918	(1.0)PULLED INTO PEN, STUMBLING, HEAD SHAKING; (55.0)LAYING QUIETLY, NO EFFORTS AT FOOD; (62.0)TREADMILLED WITH ACCEPTABLE RESULTS, NO GAIT PROBLEMS
25-Jul-96	917	(1.0)WALKED INTO PEN; (7.0)EATING; (65.0)TREADMILLED WITH ACCEPTABLE RESULTS
25-Jul-96	920	(1.0)WALKED INTO PEN; (10.0)EATING, VIGOROUS HEAD SHAKING; (19.0)MORE HEAD SHAKING; (52.0)SEVERAL TEETH GRINDING SOUNDS; (65.0)TREADMILLED WITH ACCEPTABLE RESULTS
30-Jul-96	921	(2.0)WALKED INTO PEN, HEAD SHAKING; (4.0)STILL HEAD SHAKING; (8.0)EAR SCRATCHING; (20.0)CONTINUED EAR SCRATCHING; (60.0)TREADMILLED WITHOUT DIFFICULTY
30-Jul-96	919	(1.18)WALKED INTO PEN; (11.50)EATING; (60.0)NORMAL GAIT, TREADMILLED FINE
31-Jul-96	877	(2.0)PULLED INTO CAGE; (5.0)STUMBLED AND LEANING ON WALL; (9.0)CIRCLING AND FALLING TO RIGHT; (60.0)TREADMILLED WITHOUT PROBLEMS. STUMBLING, FALLING TO R. COMPLETE, TREADMILLED (PERSISTENT ATAXIA)
31-Jul-96	879	(1.60)WALKED INTO PEN, UNSTEADY GAIT, HEAD SHAKING; (10.0)STAGGERING; (23.0)SHIVERING; (50.0)EATING, STILL SOME GAIT DISTURBANCES, SOME HEAD SHAKING; (60.0)TREADMILLED WITH ZERO PROBLEMS
01-Aug-96	878	(1.76)WALKED INTO CAGE, HEAD SHAKING; (4.0)SKIN BEND, NOT INTERESTED IN FOOD; (30.0)APPEARS MALAISE AND ANOREXIC; (37.0)HEAD SHAKING; (60.0)TREADMILLED WITH NO PROBLEMS, BUT VERY VOCAL
01-Aug-96	876	(2.0)WALKED INTO PEN, SKIN BEND, EATING; (10.0)HEAD SHAKING; (16.0)HEAD SCRATCHING ON PEN; (23.0)SCRATCHING RIGHT SIDE OF BODY ON PEN AND THEN LEFT SIDE; (60.0)TREADMILLED EXCELLENT
06-Aug-96	894	(2.0)WALKED INTO PEN, EATING; (4.0)NORMAL GAIT; (50.0)TREADMILLED FINE, BUT LEANING TO RIGHT
06-Aug-96	892	(1.87)ASSISTED INTO PEN, SEEMS TO HAVE VERTIGO, UNABLE TO STAND; (5.0)UNSTEADY GAIT, EATING; (10.0)SKIN BEND, SHIVERING; (12.0)MALAISE; (60.0)TREADMILLED WITH NO PROBLEMS. MILD ATAXIA
07-Aug-96	893	(2.0)PULLED INTO CAGE, APPEARS TO HAVE VERTIGO, SKIN BEND, UNABLE TO STAND, SHIVERING; (4.0)MALAISE AND ANOREXIA; (60.0)POOR TREADMILL, FALLING LEFT AND RIGHT, UNABLE TO MAINTAIN SPEED. SHIVERING. UNABLE TO STAND. INCONTINENT OF STOOL. ANOREXIC. UNSTEADY GAIT. POOR TREADMILL. PERSISTENT ATAXIA

07-Aug-96	891	(2.0)PULLED INTO PEN, EATING; (6.0)SOME LAMENESS, UNSTEADY; (7.0)HEAD SHAKING; (60.0)TREADMILLED WITHOUT DIFFICULTY
08-Aug-96	890	(2.0)PULLED INTO PEN UNSTEADY GAIT, EATING, SHIVERING; (6.0)HEAD SHAKING; (30.0)REMAINS UNSTEADY; (60.0)TREADMILLED EXCELLENT. SHIVERING, MILD ATAXIA. MINIMAL APPETITE. MILD ANOREXIA. TREADMILLED.
08-Aug-96	895	(2.0)WALKED IN PEN, EATING; (5.0)HIND LEGS SPREAD WIDE; (6.0)STUMBLING; (9.0)SHIVERING; (20.0)MALAISE; (60.0)POOR TREADMILL. UNSTEADY GAIT. DOWN ON KNEES, SHIVERING, PERSISTENT ATAXIA, SCRATCHING, MALAISE.
13-Aug-96	928	(2.0)PULLED INTO PEN, SKIN BEND; (5.0)HEAD SHAKING, TEETH GRINDING; (8.0)VOMITED, UNSTEADY; (12.0)SCRATCHING, UNSTEADY GAIT; (25.0)SHIVERING; (30.0)SHAKING HEAD; (60.0)FEELS MALAISE, TREADMILLED LEANING TO RIGHT AND SQUEELING LOUDLY. PERSISTENT ATAXIA
13-Aug-96	924	(1.83)WALKED INTO PEN, STEADY GAIT, HEAD SHAKING, EATING; (10.0)SCRATCHING BODY, HEAD SHAKING, EATING; (60.0)TREADMILLED WITHOUT DIFFICULTY
14-Aug-96	925	(1.83)WALKED INTO PEN, EATING; (60.0)TREADMILLED, NO PROBLEMS
14-Aug-96	926	(1.65)PULLED INTO PEN; (60.0)TREADMILLED ONLY FAIR, SQUEALING LOUDLY
15-Aug-96	927	(2.0)PULLED INTO PEN, EATING, HEAD SHAKING; (60.0)TREADMILLED WITHOUT DIFFICULTY
15-Aug-96	929	(1.83)PULLED INTO CAGE, AGITATED, CIRCLING IN PEN; (5.0)STUMBLING, HEAD SHAKING; (10.0)LOSING BALANCE; (60.0)TREADMILLED GOOD, SEEMS TO BE LEANING ON LEFT WALL. PERSISTENT ATAXIA
04-Sep-96	40	(1.98)PULLED INTO PEN, MILD LIMB WEAKNESS; (5.0)UNSTEADY GAIT; (60.0)POOR TREADMILL, SQUEELING, ATAXIA
04-Sep-96	42	(2.0)PULLED INTO PEN, NYSTAGMUS IN BOTH EYES, SHIVERING, UNABLE TO STAND; (5.0)POOR APPETITE; (10.0)NYSTAGMUS CONTINUES; (30.0)SHIVERING, MALAISE; (36.0)STILL UNABLE TO STAND; (75.5)WEAK TREADMILL DUE TO FRONT LIMB WEAKNESS. PROGRESSIVE HIND LEG WEAKNESS
05-Sep-96	37	(1.82)PULLED INTO PEN, VOMITED; (5.0)UNSTEADY GAIT; (10.0)SHIVERING; (60.0)UNABLE TO STAND, FALLING SIDE TO SIDE, NO TREADMILL. PERSISTENT ATAXIA
05-Sep-96	39	(1.83)PULLED INTO PEN, UNSTEADY, EATING, NYSTAGMUS, SKIN BEND; (30.0)CONDITIONS CONTINUE; (60.0)TREADMILL WITHOUT PROBLEMS. (L) HIND WEAKNESS. REST. RESOLVED; PERSISTENT ATAXIA
06-Sep-96	38	(2.0)WALKED INTO PEN, SKIN BEND; (5.0)HEAD SHAKING, EATING; (60.0)TREADMILLED WELL
06-Sep-96	41	(1.98)WALKED INTO PEN, SKIN BEND, SHIVERING, EATING; (15.0)HEAD SHAKING; (20.0)SCRATCHING; (60.0)TREADMILLED EXCELLENT. NECROPSY
10-Sep-96	46	NO WEAKNESS, ANOREXIA OR SKIN BENDS
10-Sep-96	45	PERSISTENT ATAXIA, SKIN BENDS: NO WEAKNESS
11-Sep-96	47	(5.0)UNSTEADY GAIT; (30.0)ZERO APPETITE; (60.0)TREADMILLED, SEVERE LEANING TO LEFT SIDE; PERSISTENT ATAXIA
11-Sep-96	43	(1.98)UNSTEADY GAIT, SHOOK HEAD; (6.0)SCRATCHING EAR; (60.0)TREADMILLED WELL
12-Sep-96	48	(1.45)WALKING, SCRATCHING LEFT SIDE; (3.18)HEAD SHAKING; (30.0)SHIVERING; (60.0)TREADMILLED EXCELLENT
12-Sep-96	44	(1.25)UNSTEADY GAIT, HEAD SHAKING; (3.0)LOOSE STOOL, NO APPETITE; (5.0)HEAD BOBBING; (15.0)MALAISE; (60.0)TREADMILLED FINE; PERSISTENT ATAXIA
17-Sep-96	54	(60.0)TREADMILLED WELL
17-Sep-96	55	(1.95)PULLED INTO PEN, STAGGERING, FELL ONTO BUTTOCKS; (4.83)STOOD WITH ASSISTANCE; (6.0)HEAD SHAKING, VOMITED; (8.0)MALAISE; (60.0)TREADMILLED LEANING AGAINST LEFT SIDE OF WALL, SQUEELING LOUDLY, UNABLE TO MAINTAIN SPEED. PERSISTENT ATAXIA
18-Sep-96	53	(1.83)SCRATCHING; (60.0)TREADMILLED WELL
18-Sep-96	56	(60.0)TREADMILLED WELL
19-Sep-96	57	(60.0)TREADMILLED POORLY; PERSISTENT ATAXIA



19-Sep-96	52	(1.83)UNSTEADY GAIT; (28.0)NO APPETITE; (38.0)TEETH GRINDING; (60.0)TREADMILLED POORLY, FALLING LEFT TO RIGHT; PERSISTENT ATAXIA
24-Sep-96	64	(2.0)UNSTEADY GAIT, STUMBLED TO KNEES, HEAD SHAKING; (10.0)HEAD SHAKING; (30.0)MILD RESIDUAL UNSTEADINESS; (60.0)SQUEALED DURING TREADMILL; TRANSIENT ATAXIA
24-Sep-96	67	(2.0)UNSTEADY GAIT, FELL TO ABDOMEN; (5.0)SHIVERING; (9.0)VOMITED; (20.0)TEETH GRINDING; (25.0)FULLY RECUMBENT; PERSISTENT ATAXIA
25-Sep-96	63	(60.0)TREADMILLED WITH NO PROBLEMS
25-Sep-96	66	(60.0)TREADMILLED, NO PROBLEMS
26-Sep-96	65	(5.0)SHIVERING; (30.0)NO SHIVERING; (60.0)TREADMILLED EXCELLENT
26-Sep-96	62	(60.0)TREADMILLED WELL
01-Oct-96	75	(1.98)WALKING, EATING; (5.0)CHEWING, TEETH GRINDING, VOMITED, SHIVERING; (10.0)VOMITED, SITTING ON HIND LEGS; (20.0)MALAISE
01-Oct-96	74	(60.0)NO WEAKNESS, NO ATAXIA, NO SKIN DCS
02-Oct-96	71	(10.0)APPETITE MINIMAL; (60.0)NO WEAKNESS, NO ATAXIA, NO SKIN DCS
02-Oct-96	72	(18.0)WALKING AND EATING; (60.0)TREADMILLED POORLY, LEANING AND FALLING LEFT TO RIGHT; PERSISTENT ATAXIA.
03-Oct-96	73	(1.87)WALKED WITH ASSISTANCE, UNSTEADY GAIT; (25.0)POOR APPETITE; (60.0)TREADMILLED WITH SOME LEANING TO WALL. NO WEAKNESS; PERSISTENT ATAXIA
03-Oct-96	70	(60.0)WALKING, EATING AND NO WEAKNESS, ATAXIA OR SKIN DCS
09-Oct-96	92	(2.0)WALKING, EATING; (15.0)SKIN BEND; (60.0)SKIN DCS, NO WEAKNESS, NO ATAXIA
09-Oct-96	90	(1.25)ASSISTED INTO PEN, UNSTEADY GAIT, VERY ATAXIC, FALLING LEFT TO RIGHT, EATING; (5.0)SHIVERING; (10.0)GRINDING TEETH AND SHIVERING; (60.0)SHIVERING DURING SLEEPING PHASE; ZERO SKIN DCS; POOR TREADMILL
10-Oct-96	94	(1.45)WALKING, SHIVERING; (5.0)ATAXIA; (10.0)FALLING LEFT AND RIGHT; (60.0)TREADMILLED POORLY, PERSISTENT ATAXIA, NO WEAKNESS, NO SKIN DCS
10-Oct-96	93	(13.0)SCRATCHING; (30.0)POOR APPETITE; (60.0)NO WEAKNESS, NO ATAXIA, NO SKIN DCS
16-Oct-96	97	(5.0)SHOOK HEAD ONCE; (60.0)TREADMILLED WELL, NO WEAKNESS, ATAXIA OR SKIN DCS
16-Oct-96	95	(2.0)ASSISTED INTO PEN, VERY ATAXIC, SHIVERING, ON KNEES, POOR APPETITE; (20.0)VERY LETHARGIC, FALLING LEFT TO RIGHT; (60.0)TREADMILLED, SOME LAMENESS; SEVERE ATAXIA
17-Oct-96	98	(2.0)NOTED STUBBORN PIG; (9.0)STUMBLED RIGHT SIDE, SCRATCHING ON CAGE; (60.0)TREADMILLED WELL; PERSISTENT ATAXIA
17-Oct-96	96	(2.0)WALKED INTO PEN, VERY ATAXIC, FALLS LEFT AND RIGHT, ANOREXIC; (8.0)FIRST SIGN OF SKIN DCS; (30.0)SHIVERING; (60.0)TREADMILLED POORLY, UNABLE TO MAINTAIN SPEED, FALLING LEFT TO RIGHT, NO WEAKNESS OR SKIN DCS; PERSISTENT ATAXIA
22-Oct-96	606	(60.0)EATING THE ENTIRE HOUR, TREADMILLED FINE
22-Oct-96	607	(2.0)SKIN BEND ON RIGHT SNOOT; (5.0)SKIN BEND COVERING WHOLE SNOOT; (20.0)SKIN DCS ON SNOOT CLEARING SOMEWHAT; (60.0)TREADMILLED WELL
23-Oct-96	605	(2.0)UNSTEADY GAIT; (5.0)EATING, HYPEREXTENDING HIND LEGS; (10.0)NOTICED SKIN DCS ON RIGHT FRONT HOOF; (45.0)ATAXIA RESOLVED
23-Oct-96	604	(2.83)UNSTEADY GAIT; (5.0)POOR APPETITE; (10.0)FELL ON BUTTOCKS AND REMAINED; (60.0)MILD ATAXIA PERSISTENT ON TREADMILL
06-Nov-96	630	(3.0)SHAKING OF HEAD; (10.0)SKIN BEND ON LEFT SIDE OF JAW AND ON SNOOT; (60.0)TREADMILLED EXCELLENT

06-Nov-96	632	(1.95)EXCESSIVELY COVERED IN SKIN BENDS, UNSTEADY GAIT, HIND LEG WEAKNESS; (2.0)LABORED RESPIRATION; (60.0)UNABLE TO TREADMILL, OBVIOUS HIT.
07-Nov-96	629	(5.0)HEAD SHAKING ONCE, SKIN BEND ON SNOOT; (60.0)TREADMILLED WELL
07-Nov-96	627	(2.0)WALKED INTO PEN, UNSTEADY, SOME FALLING; (60.0)TREADMILLED WITH SQUEALING LOUDLY BUT NO PROBLEMS
13-Nov-96	640	(3.70)PULLED INTO PEN, SKIN BEND ON SNOOT, UNSTEADY, EATING; (10.0)HYPEREXTENDING HIND LEGS, FALLING LEFT TO RIGHT ONTO CAGE; (20.0)CHEWING, SKIN BEND LEFT SIDE OF JAW; PERSISTENT ATAXIA
13-Nov-96	641	(60.0)TREADMILLED WELL
14-Nov-96	642	(60.0)TREADMILLED WELL
14-Nov-96	643	(3.0)SKIN BEND ON SNOOT; (60.0)TREADMILLED WELL
19-Nov-96	649	(1.83)UNABLE TO STAND, SKIN BENDS RIGHT FRONT AND RIGHT HIND LEGS, ANOREXIC AND SHIVERING; (5.0)RESTING ON FRONT KNEES; (60.0)UNABLE TO TREADMILL
19-Nov-96	648	(3.0)UNSTEADY, EATING; (6.0)SKIN BEND ON SNOOT AND ON LEFT HIND REGION; (60.0)TREADMILLED; MILD DEFICIT - NOTED SQUEALING LOUDLY DURING PROCEDURE
20-Nov-96	651	(2.0)STAGGERING, SKIN BENDS ACROSS LOWER BACK AND SNOOT, ATAXIA IN HIND LEGS; (5.0)GRUNTING LOUDLY, SEVERE DISTRESS; (7.0)IN SLING AND SEDATED
20-Nov-96	652	(2.0)UNSTEADY GAIT, FALLING LEFT TO RIGHT, SKIN BENDS ON NOSE AND SHIVERING; (5.0)NO EATING, GRUNTING LOUDLY AND GRINDING TEETH; (7.0)GRUNTING CONTINUES, PLACED IN SLING AND SEDATED
21-Nov-96	650	(10.0)SKIN DCS RIGHT HIND REGION
26-Nov-96	658	(2.0)UNSTEADY; (60.0)SKIN DCS NOTED ON FACE, JAW, TREADMILLED POORLY
26-Nov-96	657	(60.0)TREADMILLED ACCEPTABLY OR EQUAL TO PRE-DIVE TREADMILL. (NOTE):PIG GIVEN TO DR FORCINO. NOTED AFTER WEEKEND TO BE LIMPING ON RIGHT FRONT AND RIGHT READ, POSSIBLY DUE TO CENTRAL LESION; POSSIBLE MILD LATE HIT
27-Nov-96	660	(60.0)TREADMILLED WITH ZERO VISIBLE PROBLEMS
27-Nov-96	661	(60.0)TREADMILLED EXCELLENT
04-Dec-96	673	(60.0)TREADMILLED WITH SOME LEANING TO LEFT, POSSIBLE MILD HIT
04-Dec-96	672	(3.0)SHIVERING; (60.0)TREADMILLED WELL
05-Dec-96	670	(60.0)TREADMILLED WITH SOME DIFFICULTY
05-Dec-96	669	(2.0)UNSTEADY GAIT; (6.0)SKIN BENDS; (15.0)RESTING ON FRONT KNEES; (40.0)WALKING WITH IMPROVED GAIT; (60.0)TREADMILLED POORLY WITH LOUD SQUEALING
06-Dec-96	671	(60.0)POOR TREADMILL, SQUEALING, JUMPING, REFUSED TO STAND AFTER 2.0 MPH
06-Dec-96	674	(1.83)MILD UNSTEADY GAIT; (5.0)HEAD SHAKING; TRANSIENT ATAXIA



## **APPENDIX 4: Graphic and Real-Time Descriptions of the Dive Programs**

### **A. Graphic Representation Key**

Solid line represents air

Dashed line represents 20% oxygen in helium

### **B. Real-time Record Key**

#### **Top Line**

1st number - depth in feet of seawater

2nd number - bottom time in minutes

3rd number - ascent time in minutes

#### **Second Line**

1st number - initial breathing gas (1.0 = air)

2nd number - number of animals that made the dive\*

3rd number - indicates outcome (0 = no outcome; 1 = DCS)\*

\*As the profiles shown in this appendix serve only to illustrate the actual dive profile, the number of animals shown is always 1, and the outcome shown is always 0.

#### **Lines 3 to end**

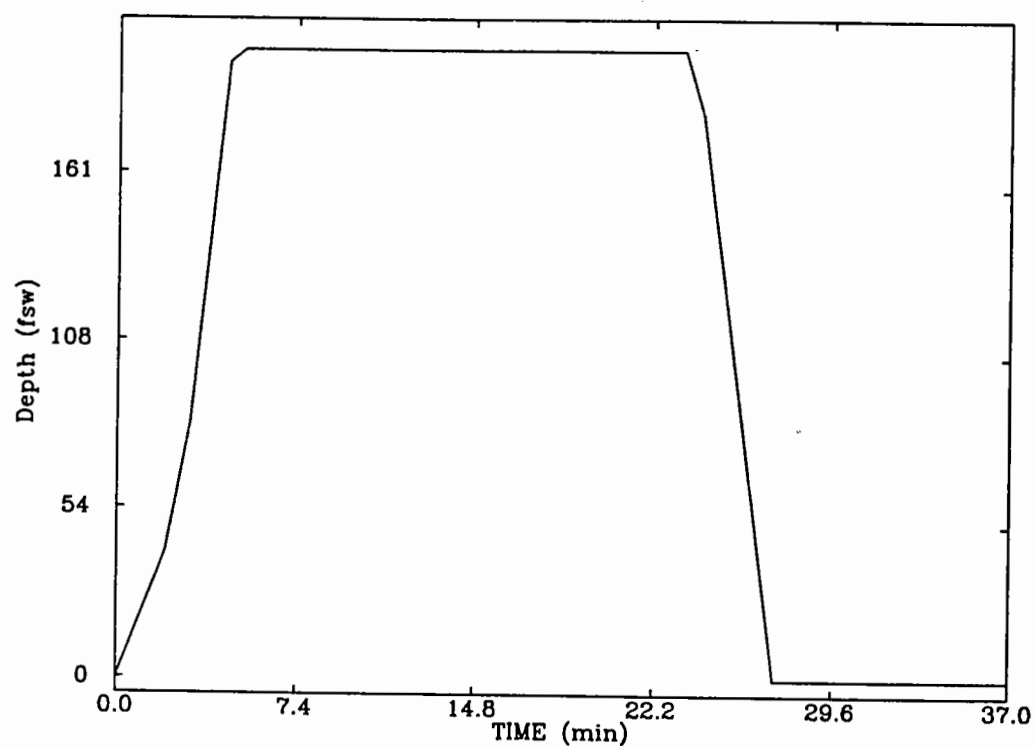
Column 1: time in minutes

Column 2: depth in feet of seawater

Column 3: breathing gas (1.0 = air; 4.2 = 20%O<sub>2</sub> in He)

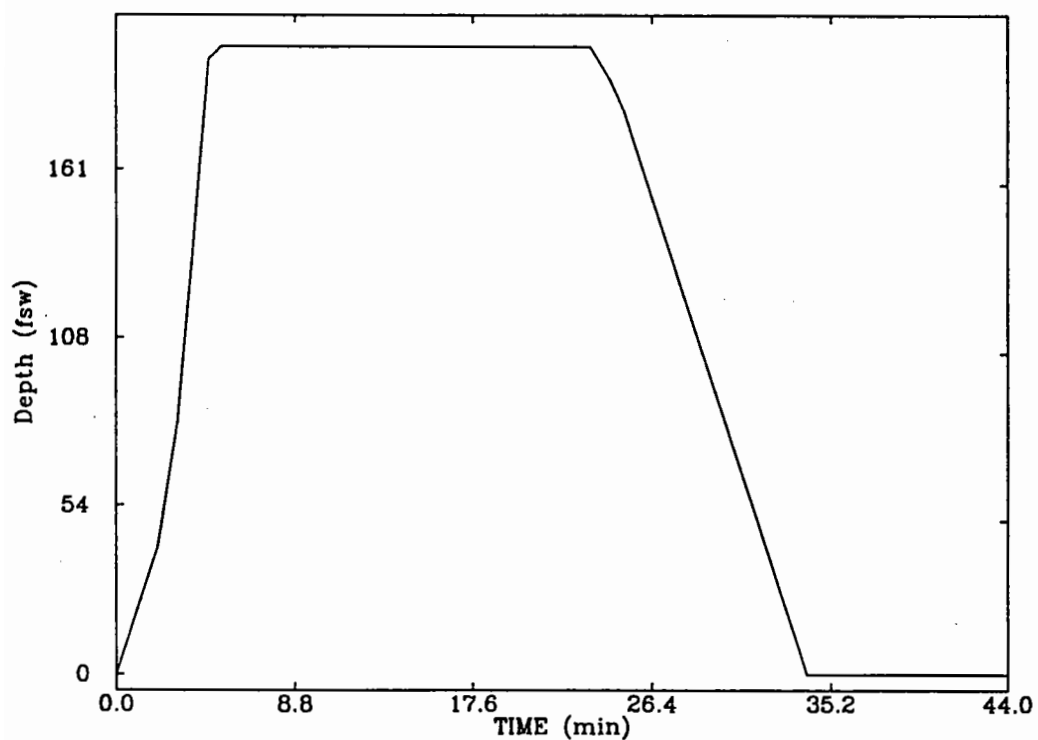
Column 4: Time elapsed to complete gas switching in minutes

### Program #1



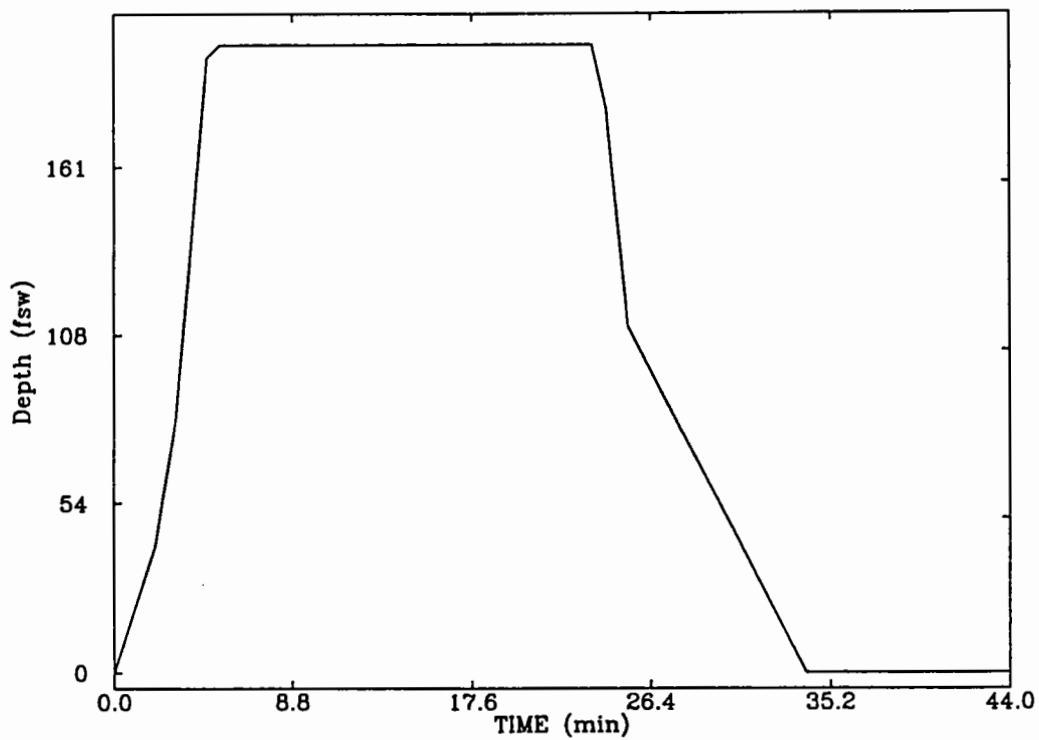
Program #1		
200,	23.43,	3.37,
1.0	1,	0
Time	Depth	
0.0	0	
2.0	40	
3.0	80	
4.56	196	
5.20	200	
23.43	200	
24.20	180	
25.20	120	
26.20	60	
27.20	0	

### Program #4



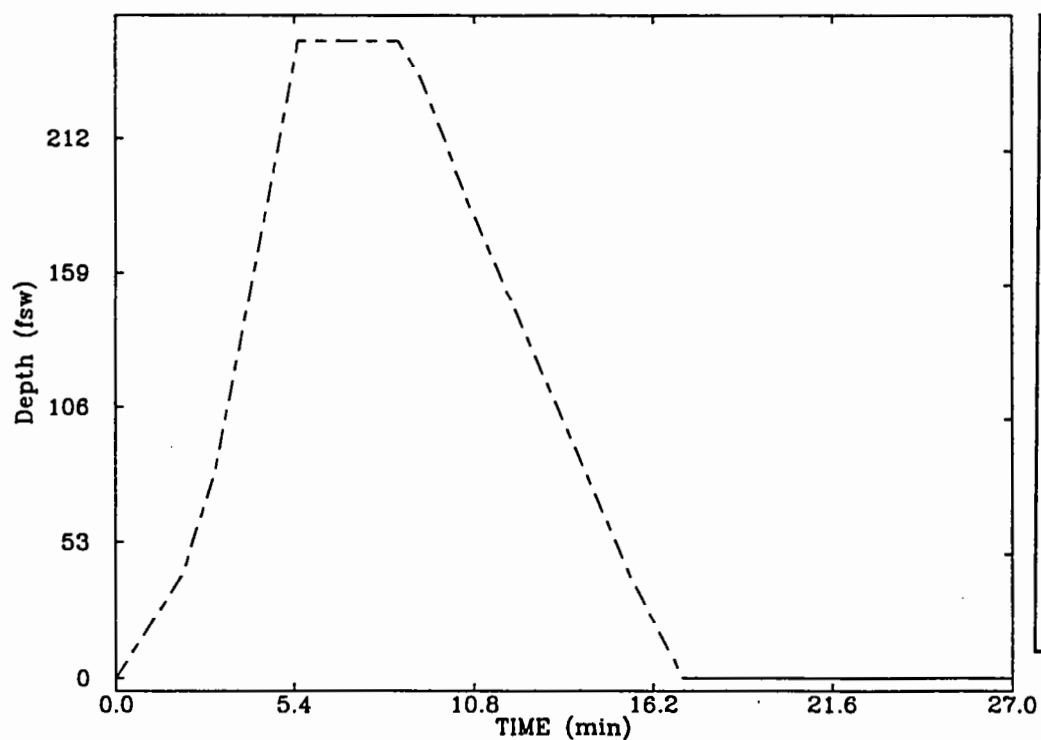
Program #4		
200,	23.36,	10.24,
1.0,	1,	0.,
Time	Depth	
0	0	
2.0	40	
3.0	80	
4.56	196	
5.2	200	
23.36	200	
24.3	190	
25.0	180	
34.0	0	

### Program #5



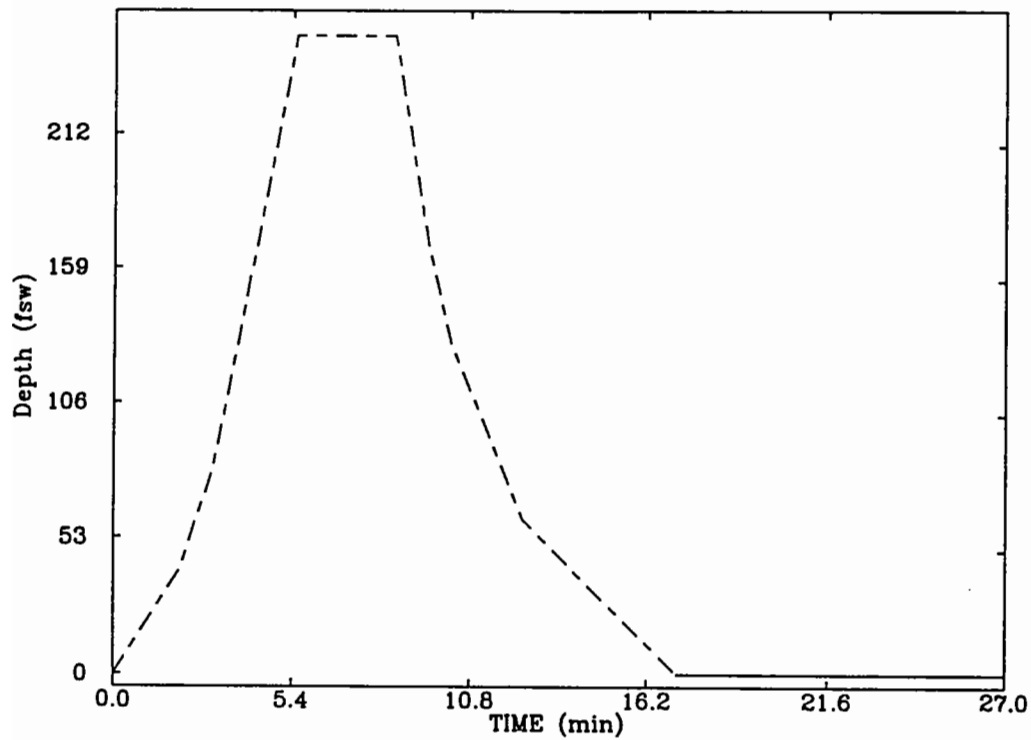
Program #5		
200,	23.52,	10.08,
1.0,	1,	0.,
Time	Depth	
0	0	
2.0	40	
3.0	80	
4.56	196	
5.20	200	
23.5	200	
24.2	180	
25.3	110	
34.0	0	

### Program #6



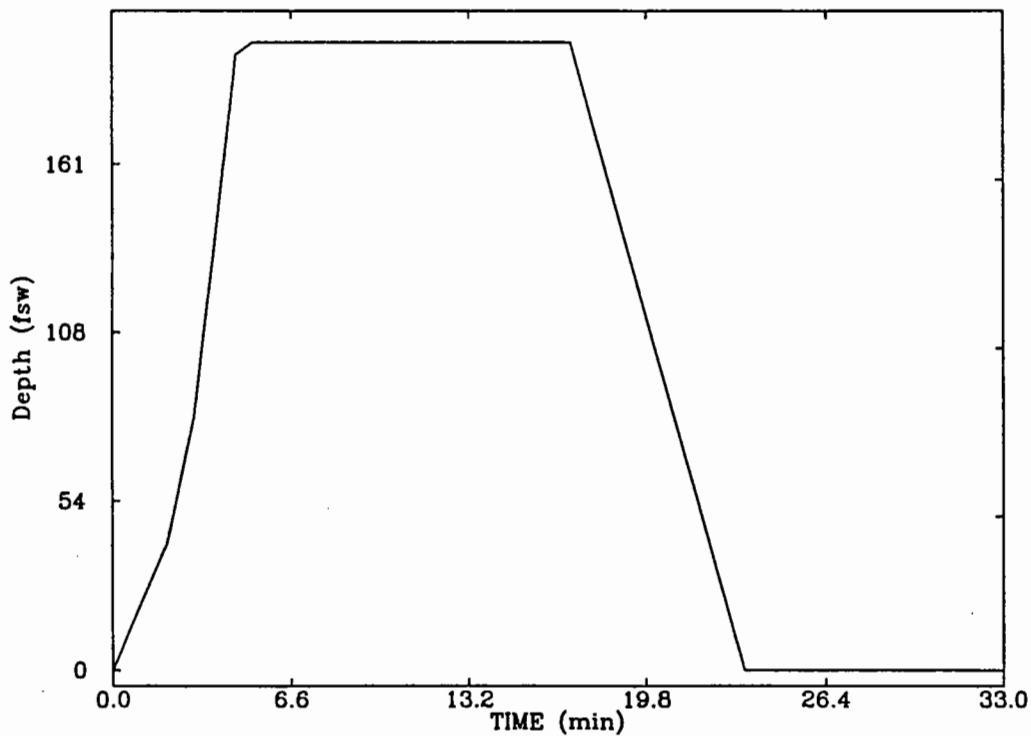
Program #6		
250,	8.50,	8.20,
1.0,	1,	0.0,
Time	Depth	
0	0	
1.0	20	
2.0	40	
3.0	80	
5.46	246	
5.50	250	
8.50	250	
9.20	235	
10.5	190	
11.5	160	
13.5	100	
15.5	40	
17.1	0	

### Program #8



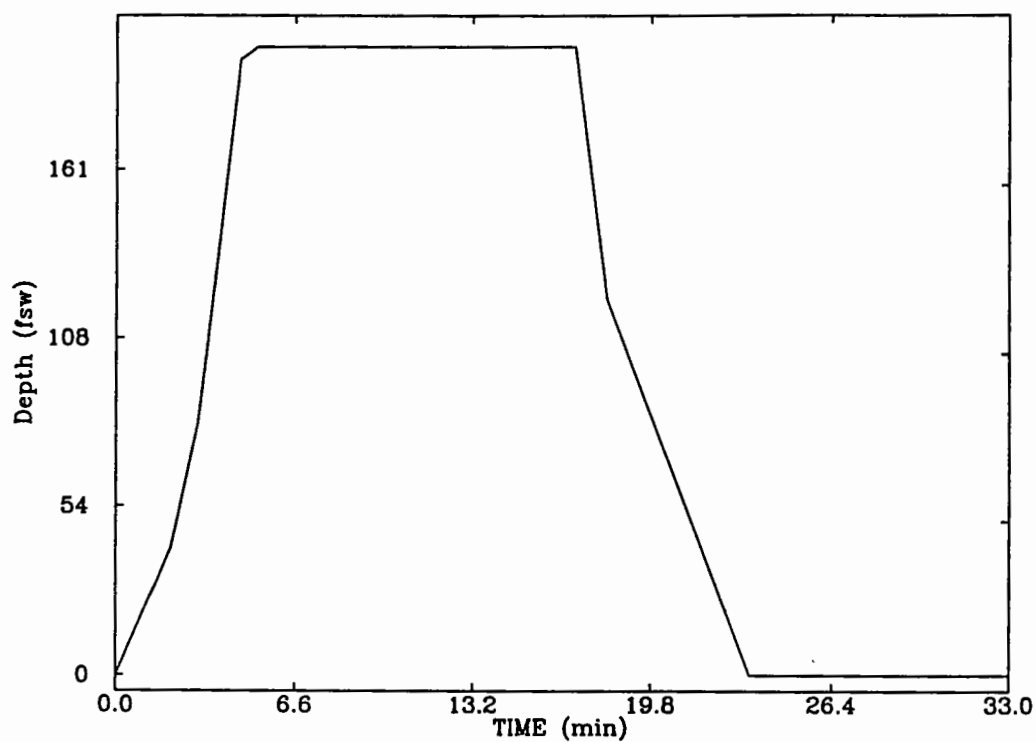
Program #8		
250,	8.5,	8.20,
1.0,	1,	0.0,
Time	Depth	
0	0	4.20, 1.0,
1.0	20	
2.0	40	
3.0	80	
5.46	246	
5.50	250	
8.50	250	
9.50	170	
10.20	130	
12.40	60	
17.10	0	1.0, 1.0,

### Program #9



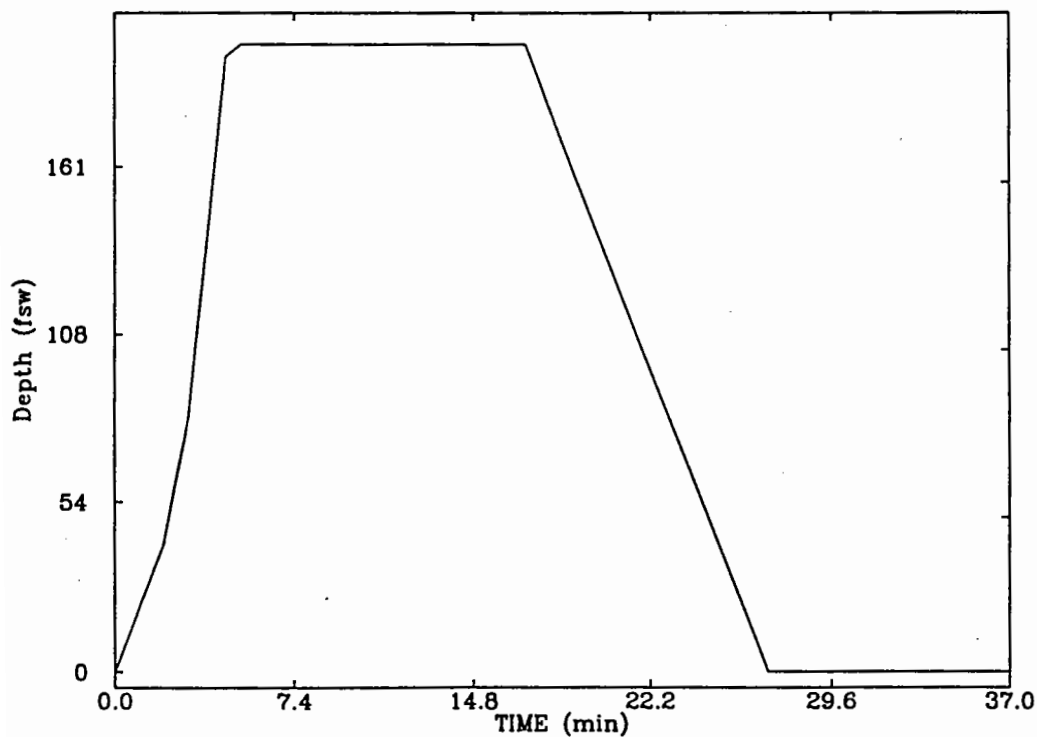
Program #9		
200,	17.0,	6.4,
1.0,	1,	0.0,
Time	Depth	
0	0	
2.0	40	
3.0	80	
4.56	196	
5.20	200	
17.00	200	
23.4	0	

### Program #10



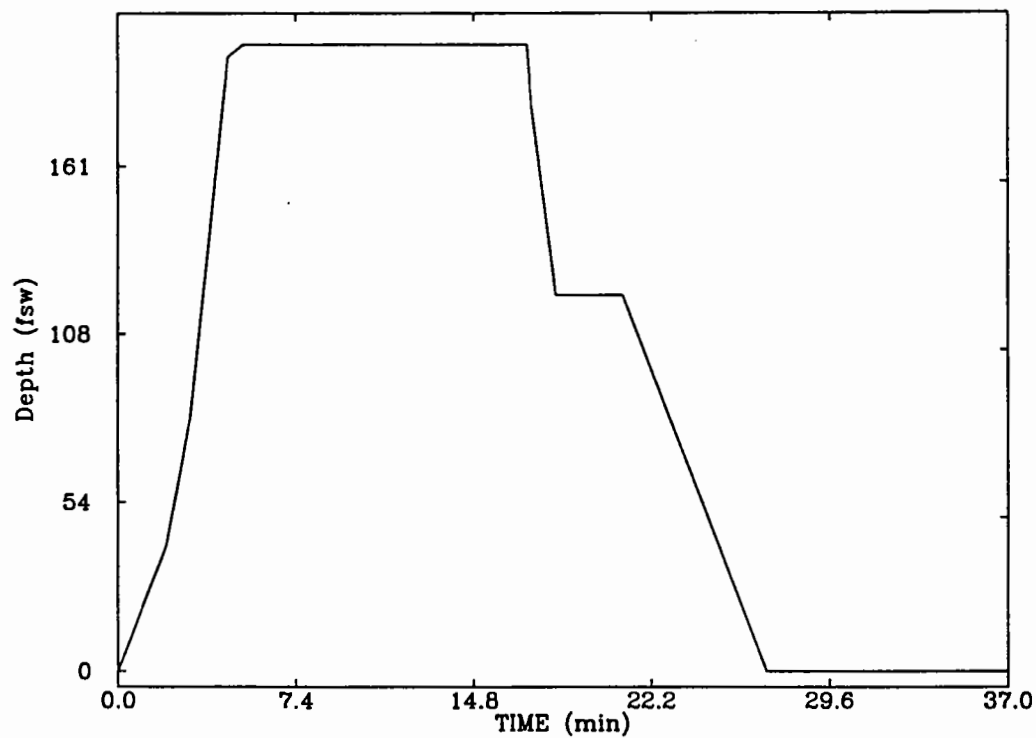
Program #10		
200,	17.0,	6.40,
1.0,	1,	0.0,
Time	Depth	
0	0	
2.0	40	
3.0	80	
4.56	196	
5.20	200	
17.00	200	
18.20	120	
23.40	0	

### Program #11



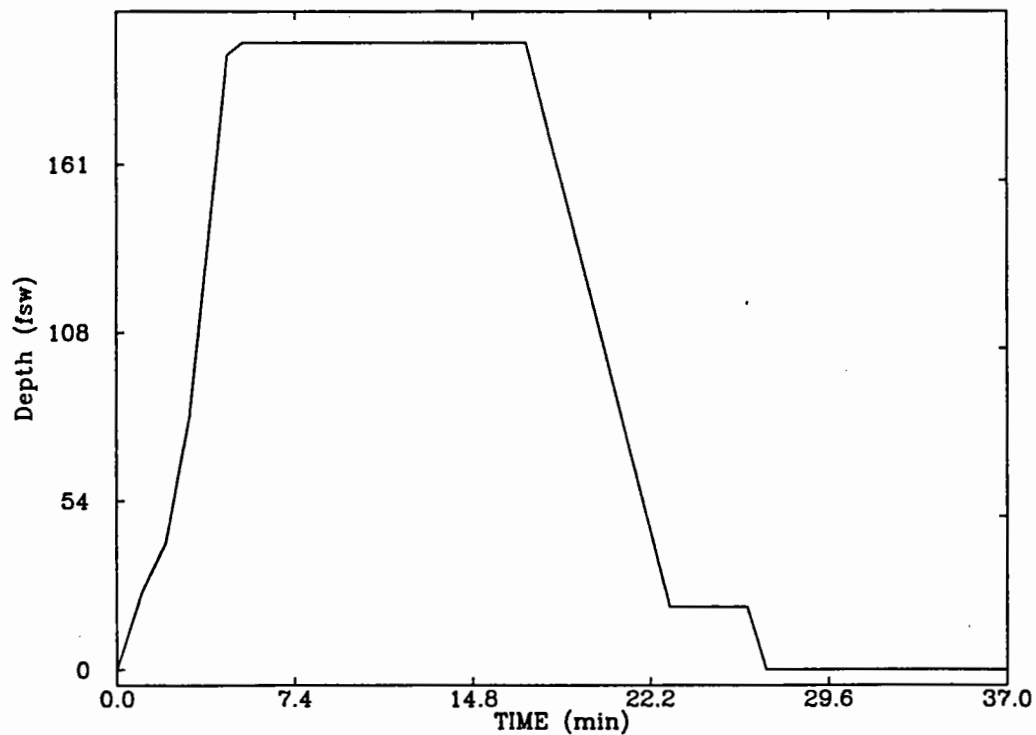
Program #11		
200,	17.0,	10.0,
1.0,	1,	0.,
Time	Depth	
0	0	
1.0	20	
2.0	40	
3.0	80	
4.56	196	
5.2	200	
17.0	200	
18.0	180	
22.0	100	
26.0	20	
27.0	0	

### Program #12



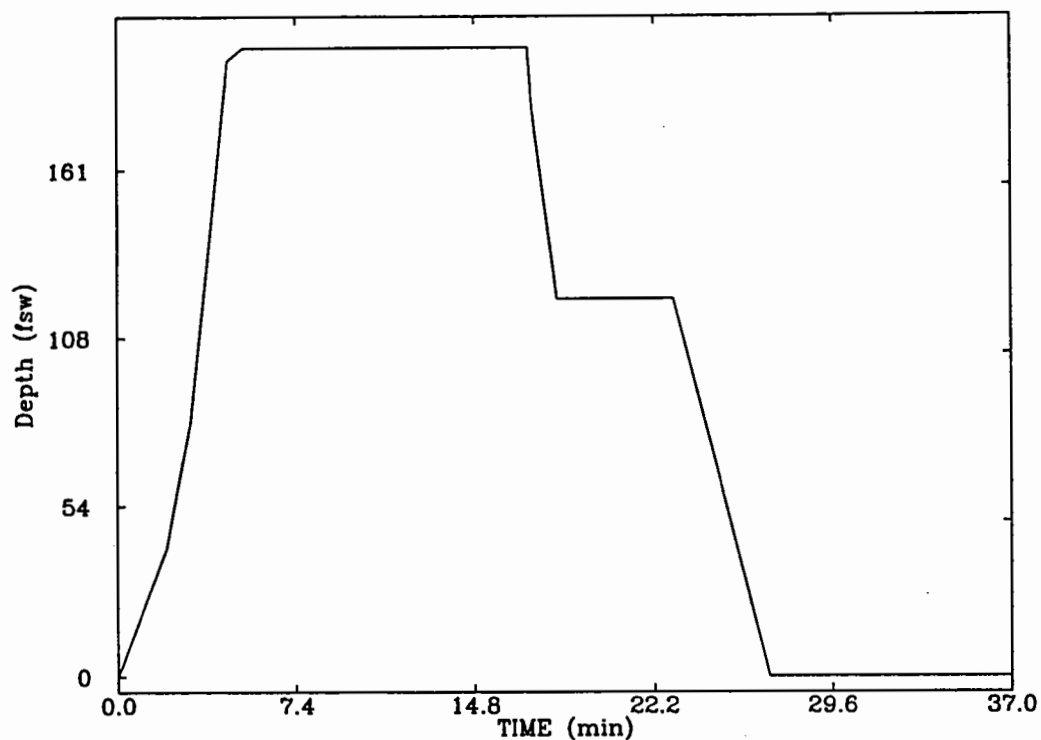
Program #12		
200,	17.0,	10.0,
1.0,	1,	0.,
Time	Depth	
0	0	
1.0	20	
2.0	40	
3.0	80	
4.56	196	
5.20	200	
17.0	200	
17.2	180	
18.2	120	
21.0	120	
23.0	80	
27.0	0	

### Program #13



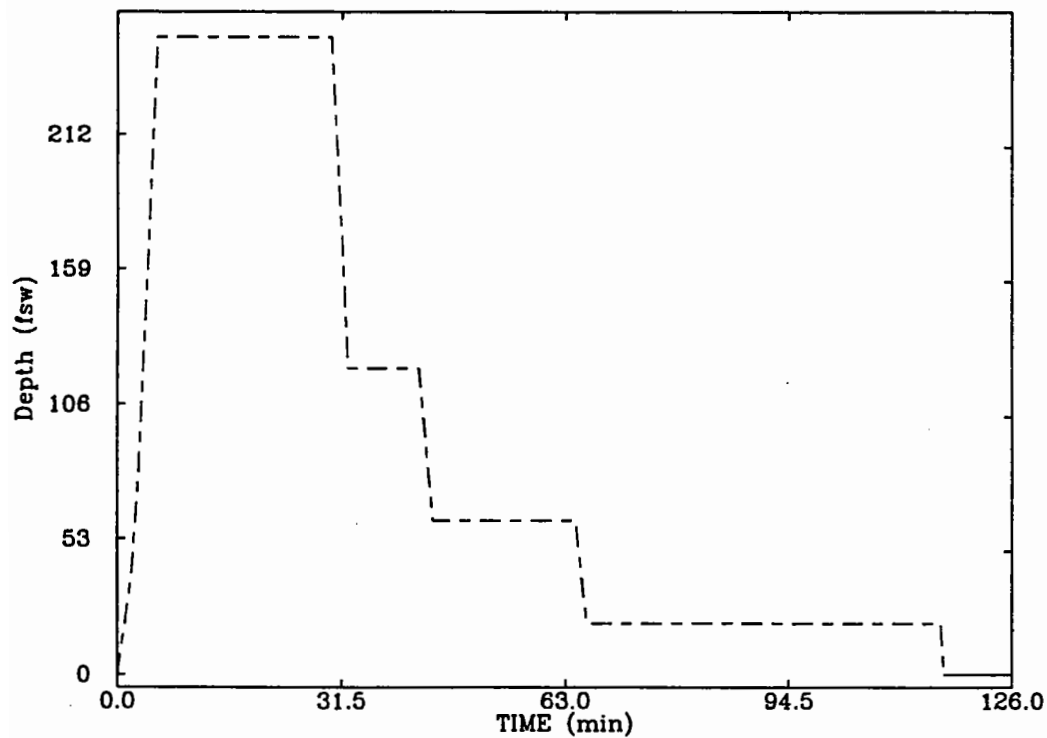
Program #13		
200,	17,	10,
1.0,	1,	0.,
Time	Depth	
0	0	
1.0	24	
2.0	40	
3.0	80	
4.56	196	
5.2	200	
17.0	200	
18.0	170	
23.0	20	
26.2	20	
27.0	0	

### Program #14



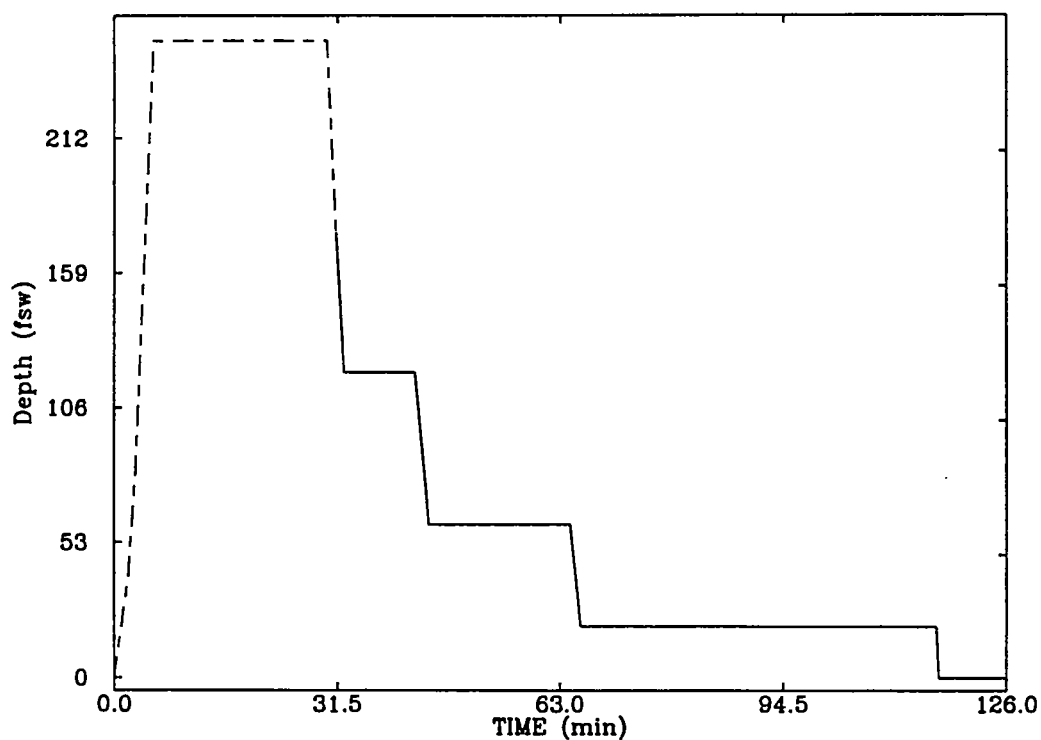
Program #14		
200,	17.0,	10.0,
1.0,	1,	0.,
Time	Depth	
0	0	
1.0	20	
2.0	40	
3.0	80	
4.56	196	
5.2	200	
17.0	200	
17.2	180	
18.2	120	
23.0	120	
25.0	60	
27.0	0	

### Program #15A



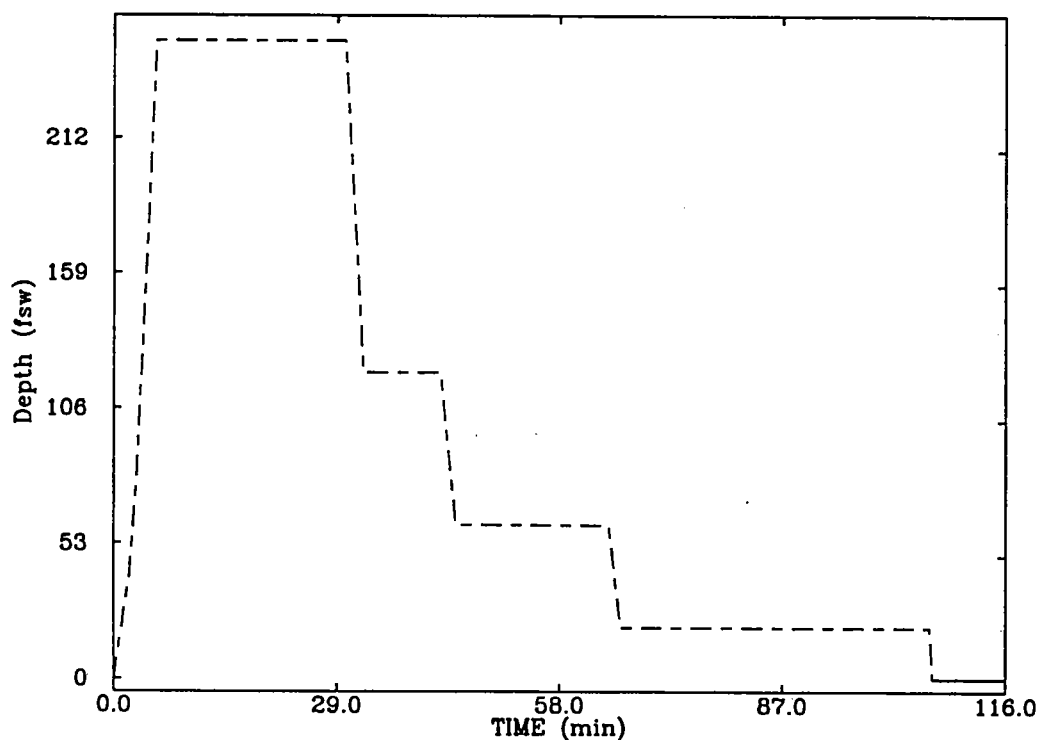
Program #15A		
250,	30.0,	86.4,
1.0,	1,	0.,
Time	Depth	
0	0	4.2, 1.0,
2.0	40	
3.0	80	
5.46	246	
5.5	250	
30.0	250	
32.4	120	
42.4	120	
44.4	60	
64.4	60	
66.0	20	
116.0	20	
116.4	0	1.0, 1.0

## Program #15AS



Program #15AS		
250,	30.0	86.4,
1.0,	1,	0.,
Time	Depth	
0	0	4.2, 1.0,
2.0	40	
3.0	80	
5.46	246	
5.5	250	
30.0	250	
31.25	175	1.0, 1.0,
32.4	120	
42.4	120	
44.4	60	
64.4	60	
66.0	20	
116.0	20	
116.4	0	

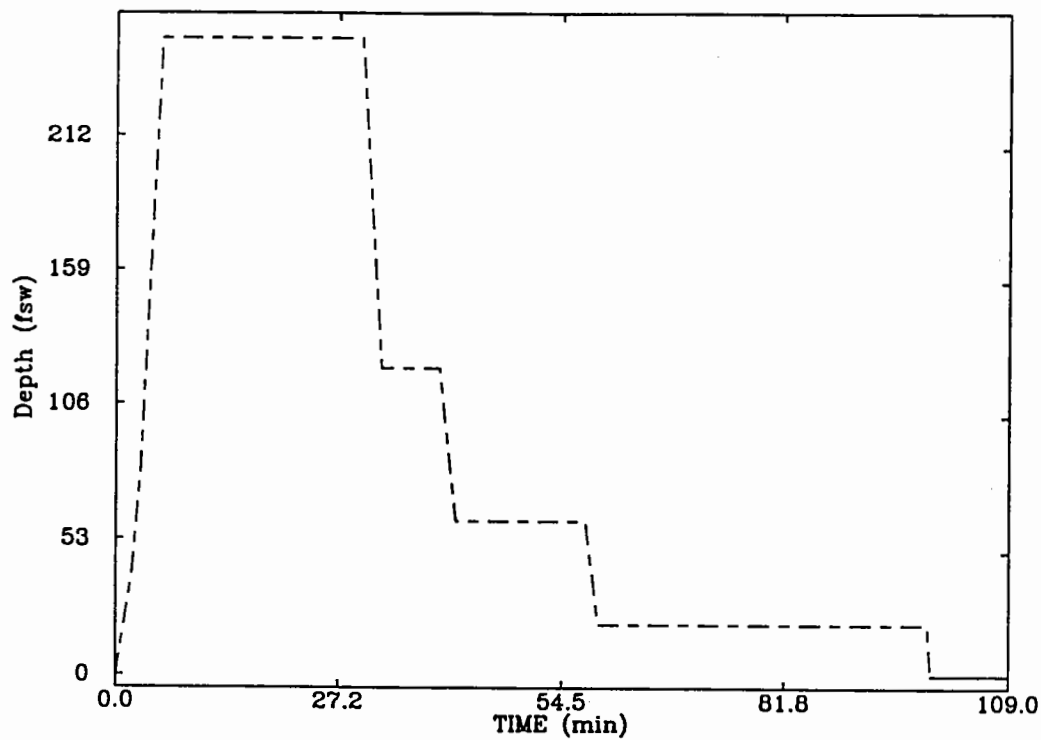
## Program #15B



Program #15B		
250,	30,	76.4,
1.0,	1,	0.,
Time	Depth	
0	0	4.20, 1.0,
2.0	40	
3.0	80	
5.46	246	
5.5	250	
30.0	250	
32.4	120	
42.4	120	
44.4	60	
64.4	60	
66.0	20	
106.0	20	
106.4	0	1.0, 1.0,



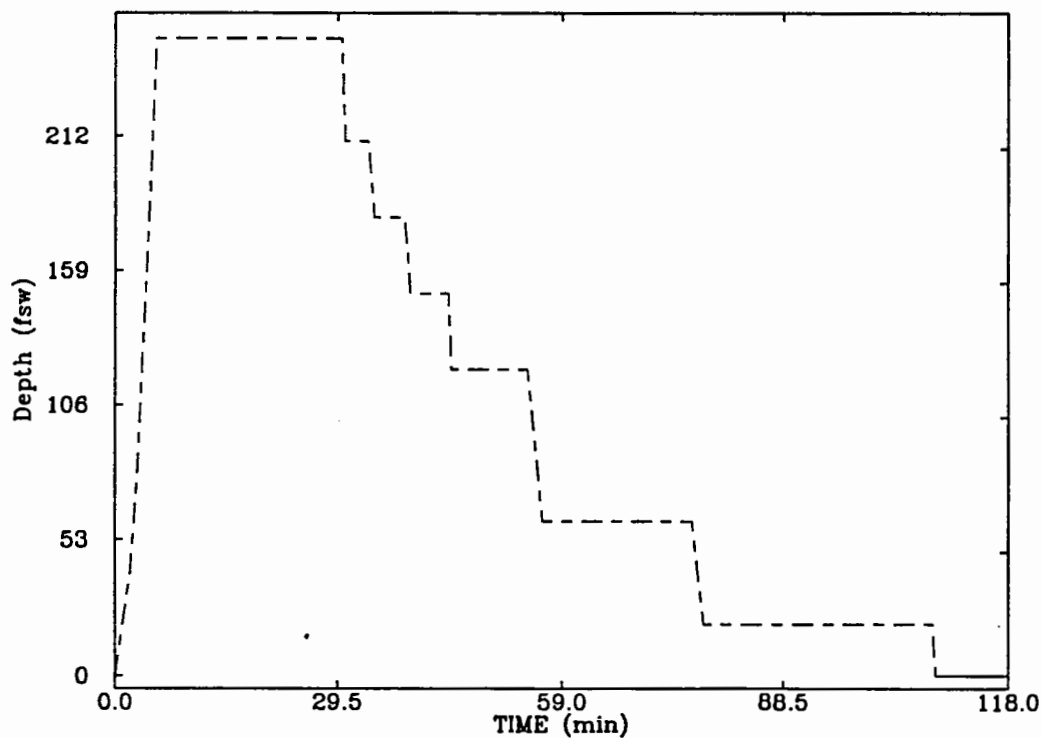
## Program #15P



Program #15P*			
250,	30,	69.4,	
1.0,	1,	0.,	
Time		Depth	
0		0	4.20, 1.0,
2.0		40	
3.0		80	
5.46		246	
5.5		250	
30.0		250	
32.4		120	
39.4		120	
41.4		60	
57.4		60	
59.0		20	
99.0		20	
99.4		0	1.0, 1.0,

\*assumed up to 250 was same as other #15

## Program #16



Program #16			
250,	30,	78.4,	
1.0,	1,	0.,	
Time		Depth	
0		0	4.20, 1.0
2.0		40	
3.0		80	
5.46		246	
5.50		250	
30.0		250	
30.49		210	
33.49		210	
34.26		180	
38.26		180	
39.03		150	
44.03		150	
44.4		120	
54.4		120	
56.4		60	
76.4		60	
78.0		20	
108.0		20	
108.4		0	1.0, 1.0,